

SNOW COLLEGE SOUTH CAMPUS WASHBURN BUILDING ART STUDIO AND NAIL SALON HVAC UPGRADES

DFCM PROJECT #04225710
RICHFIELD, UTAH

DFCM DESIGN AND CODE CRITERIA

(Fee A.E: Attach and fill in applicable data for each drawing submittal)

Applicable Codes:

International Building Code
Planning & Design Criteria to Prevent
Architectural Barriers for the Aged and
the Physically Handicapped.

Year
2003

International Mechanical Code
International Plumbing Code
Ashrae/IES Energy Code
National Electrical Code

Year
2003

2003
1999
2002

A. Occupancy and Group :

Change in Use : Yes No ☒

Mixed Occupancy : Yes No ☒

B. Type of Construction (Circle)

I
F.R.

II
F.R.

II
1 HR.

II
N

III
1 HR.

III
N

IV
H.T.

V
1 HR.

V
N

C. Location on Property : F.R. Ext. Walls (Hrs.): Ext. Wall Opening(s) Protection (Hrs.) Each Occupancy

D. Occupancy separation required (Hrs.):

Sprinklered: Indicate Yes or No

Stories : 1 or multiple

a. Actual Area²(ft)

b. Basic allowable area :

c. Allowable Area Increase due to side yards: N

% | Area (ft)

% | Area (ft)

% | Area (ft)

d. Side yard area incredse (ft):

Accumulative sub-total (b=d):

Sprinkler: area increase (x3 single)

(x 2 multi)

e. Total Allowable Area for a single story:

x 2 for multi-story building:

f. Ratio = a/e

(Actural divided by allowable)

E. Fire-Resistive Requirements (Hrs.): (1 Hr., 2Hr., 3Hr., 4Hr., N. H.T.)

Exterior Bearing Walls:

Interior Bearing Walls:

Exterior Non-bearing Walls:

Structural Frame:

Partitions - Permanent:

Floors - Ceiling Floors

Roofs - Ceiling Roofs

Exterior Doors and Windows

Shaft Enclosures

State of Utah—Department of Administrative Services

DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT

4110 State Office Building / Salt Lake City, Utah 84114 / 538-3018

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DRAWING INDEX:

M-000	TITLE SHEET
M-001	GENERAL MECHANICAL NOTES AND LEGEND
PE-101	PLUMBING FLOOR PLAN
MD-101	MECHANICAL DEMOLITION PLAN
ME-101	MECHANICAL REMODEL PLAN
ME-501	MECHANICAL DETAILS
ME-502	MECHANICAL DETAILS
ME-601	MECHANICAL SCHEDULES
EG-101	ELECTRICAL SYMBOLS, NOTES, AND SCHEDULES
EL-101	ELECTRICAL FLOOR PLAN

MECHANICAL LEGEND					
SYMBOL	ABR.	DESCRIPTION	SYMBOL	ABR.	DESCRIPTION
AIR SIDE			WET SIDE		
		EXISTING AIR DUCT TO BE REMOVED			PUMP
		EXISTING AIR DUCT TO REMAIN			UNION
		NEW AIR DUCT			MANUAL ACTUATOR (BALL, BUTTERFLY, NEEDLE, ETC. VALVES)
		RECT. TO RECT. AIR DUCT TAKE-OFF			MANUAL ACTUATOR (GATE, GLOBE, S&D, OS&Y, ETC. VALVES)
		RECT. TO RND. AIR DUCT TAKE-OFF			
		RND. TO RND. AIR DUCT TAKE-OFF			
		RECT. TAKE-OFF AT END OF MAIN			PNEUMATIC DIAPHRAGM ACTUATOR
		FLEXIBLE AIR DUCT			ELECTRIC MOTOR ACTUATOR
		LINED DUCT			THREADED OR SWEAT VALVE CONNECTION
		VANED ELBOW			FLANGED VALVE CONNECTION
		RADIUS ELBOW			BUTTERFLY VALVE
		CONCENTRIC DUCT TRANSITION			GATE VALVE
		ECCENTRIC DUCT TRANSITION			GLOBE VALVE - STRAIGHT PATTERN
		FLEXIBLE DUCT CONNECTION			MOTORIZED 2-WAY CONTROL VALVE
		VOLUME DAMPER			MOTORIZED 3-WAY CONTROL VALVE
		SUPPLY AIR DIFFUSER			CHECK VALVE
		RETURN AIR, FRESH AIR, AND TRANSFER AIR		CBV	CIRCUIT BALANCING VALVE
		CEILING MOUNTED EXHAUST FAN OR EXHAUST GRILLE		BV	BALL VALVE
		RETURN OR OUTSIDE AIR DUCT UP		PRV	PRESSURE RELIEF VALVE
		SUPPLY DUCT UP		TDV	TRIPLE DUTY VALVE
		EXHAUST AIR INTAKE UP		TDV	TRIPLE DUTY VALVE - ANGLE
		RETURN OR OUTSIDE AIR DUCT DOWN		TDV	TRIPLE DUTY VALVE - STRAIGHT
		SUPPLY DUCT DOWN			
		EXHAUST DUCT DOWN			
		ROUND DUCT UP			AUTOMATIC AIR VENT
		ROUND DUCT DOWN			MANUAL AIR VENT
		FLEXIBLE DUCT CONNECTION			STRAINER
	AP	ACCESS PANEL			STRAINER W/ PLUGGED BLOW OFF
		EXISTING EQUIPMENT TO BE REMOVED			PRESSURE GAUGE AND GAUGE COCK -WATER
		EXISTING EQUIPMENT TO REMAIN			
		NEW EQUIPMENT			THERMOMETER AND THERMOWELL
	A	AUTOMATIC DAMPER			
	BD	BACKDRAFT DAMPER			WATER TEMPERATURE SENSOR AND THERMOWELL
	FD	FIRE DAMPER			
	FS	FIRE & SMOKE DAMPER		TW	THERMOWELL
	TSTAT	WALL MOUNTED THERMOSTAT			PRESS. & TEMP. TAP
		WALL MOUNTED TEMP. SENSOR			ELBOW UP
		SUPPLY AIR			ELBOW DOWN
		RETURN AIR			TEE UP
		EXHAUST AIR			TEE DOWN
		COMBUSTION AIR			EXISTING PIPING TO BE REMOVED
		MIXED AIR			EXISTING PIPING TO REMAIN
		FRESH AIR			NEW PIPING
		RELIEF AIR			PIPE CAP OR PLUG
GENERAL TERMINOLOGY					CONCENTRIC REDUCER
		SECTION LETTER DESIGNATION			ECCENTRIC REDUCER
		SECTION DRAWN ON THIS SHEET			FLEXIBLE CONNECTION
		DETAIL NUMBER DESIGNATION		CD	CONDENSATE DRAIN
		DETAIL DRAWN ON THIS SHEET		GF	GLYCOL FEED LINE
		MECHANICAL EQUIPMENT DESIGNATION		MU	MAKE-UP WATER LINE
		EQUIPMENT ITEM DESIGNATION		CW	CULINARY COLD WATER
		REGISTER, GRILLE OR DIFFUSER DESIGNATION WITH BALANCING CFM LISTED BELOW		HW	CULINARY HOT WATER
		GRILLE, OR LOUVER DESIGNATION WHERE BALANCING NOT REQUIRED		HWS	HEATING WATER SUPPLY
				HWR	HEATING WATER RETURN
				LPS	LOW PRESSURE STEAM SUPPLY

GENERAL TERMINOLOGY CONT.			WET SIDE CONT.		
	REVISION DESIGNATOR AND NUMBER			LPR	LOW PRESSURE STEAM RETURN
	KEY NOTE DESIGNATOR AND NUMBER			HGS	HEATING GLYCOL SUPPLY
	POC	POINT OF CONNECTION		HGR	HEATING GLYCOL RETURN
	POR	POINT OF REMOVAL		S	REFRIGERANT SUCTION LINE
	GC	GENERAL CONTRACTOR		L	LIQUID SUCTION LINE
	MC	MECHANICAL CONTRACTOR		HG	HOT GAS BYPASS LINE
	CC	CONTROL CONTRACTOR			
	EC	ELECTRICAL CONTRACTOR			
	FPC	FIRE PROTECTION CONTRACTOR			
	NIC	NOT IN CONTRACT			
	NTS	NOT TO SCALE			
	C	COMMON			
	NC	NORMALLY CLOSED			
	NO	NORMALLY OPEN			

- MECHANICAL GENERAL NOTES:**
- G-1** MECHANICAL INFORMATION IS NOT LIMITED TO THE MECHANICAL DRAWINGS. CONTRACTOR SHALL BE RESPONSIBLE FOR INFORMATION ON ALL OTHER CONSTRUCTION DOCUMENTS INCLUDING DRAWINGS BY OTHER DISCIPLINES AND SPECIFICATIONS.
- A - EACH DRAWING SHEET AND THE SPECIFICATIONS HAVE BEEN PREPARED TO SUPPLEMENT EACH OTHER AND THEY SHALL BE INTERPRETED AS AN INTEGRAL UNIT WITH ITEMS SHOWN AND NOTED ON ONE AND NOT THE OTHER BEING FURNISHED AND INSTALLED AS THOUGH SHOWN AND CALLED OUT IN ALL PLACES. ITEMS IN SPECIFICATIONS OR DRAWINGS LISTED WHICH ARE DIFFERING IN EFFICIENCY OR QUALITY SHALL BE HELD TO THE GREATEST OF: EFFICIENCY, QUALITY OR GOVERNING CODE.
- B - THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE INSTALLATION OF THE SYSTEMS ACCORDING TO THE TRUE INTENT AND MEANING OF THE CONTRACT DOCUMENTS.
- C - THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT WITH PROPER SERVICE ACCESS AND CLEARANCES ACCORDING TO MANUFACTURERS RECOMMENDATIONS. THE CONTRACTOR SHALL REVIEW SUPPLIERS BID PACKAGES FOR COMPLETENESS AND COMPLIANCE TO THE SPECIFICATIONS, SCHEDULES, AND DESIGN INTENT (ALL EQUIPMENT AND METHODS). THE CONTRACTOR SHALL REMOVE AND REINSTALL CORRECTLY AT HIS OWN EXPENSE ANY EQUIPMENT NOT IN COMPLIANCE.
- D - THE CONTRACTOR SHALL CONSULT MANUFACTURERS INSTALLATION INSTRUCTIONS FOR SIZES, METHODS, ACCESSORIES, AND CLEARANCES IN SPACE AVAILABLE PRIOR TO BIDDING PROJECT.
- E - ANYTHING NOT CLEAR OR IN CONFLICT WILL BE EXPLAINED BY MAKING APPLICATION TO THE ENGINEER IN WRITING.
- G-2** ANY AND ALL ALTERATIONS TO THE SYSTEM SHOWN SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR. ENGINEER SHALL BE NOTIFIED IN WRITING PRIOR TO CHANGES.
- G-3** CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND LOCATIONS.
- G-4** THE WORKING DRAWINGS ARE DIAGRAMMATIC. THEY DO NOT SHOW EVERY OFFSET, BEND, OR ELBOW NECESSARY FOR THE COMPLETE INSTALLATION IN THE SPACE PROVIDED. ALL LOCATIONS FOR MECHANICAL EQUIPMENT SHALL BE FIELD VERIFIED AND COORDINATED WITH ALL DRAWINGS. THE CONTRACTOR SHALL PROVIDE PROVISIONS FOR BLOCKOUTS OR CORE DRILLS THROUGH STRUCTURE.
- G-5** THE INSTRUCTION TO "PROVIDE" ALSO INCLUDES INSTALLATION.
- G-6** MECHANICAL CONTRACTOR SHALL PROVIDE AND INSTALL SMOKE AND FIRE DAMPERS AS REQUIRED BY LOCAL CODES AND AUTHORITIES.
- G-7** SHEET METAL DUCT SIZES SHOWN ON DRAWINGS ARE FREE AREA DIMENSIONS.
- G-8** PROVIDE AND INSTALL BALANCING DAMPERS IN ALL SUPPLY AIR AND EXHAUST AIR BRANCH DUCTS. BALANCE TO CFM SHOWN ON PLAN.
- G-9** PROVIDE TURNING VANES IN ALL ELBOWS OF RECTANGULAR DUCT.
- G-10** THE CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY IN HANDLING AND DISPOSING OF REFRIGERANTS, OILS, ETC. ALL SUCH MATERIALS SHALL BE HANDLED, DISPOSED, AND USED ON ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL LAWS.
- G-11** THE MECHANICAL CONTRACTOR SHALL VERIFY MOTOR VOLTAGES WITH THE ELECTRICAL DRAWING BEFORE ORDERING MOTORIZED EQUIPMENT AND CONTROLS. MOTOR NAMEPLATE VOLTAGE SHALL BE NEMA STANDARD 200 VOLT FOR 208 VOLT, THREE PHASE SYSTEM AND SHALL BE NEMA STANDARD 230 VOLT FOR 240 VOLT, THREE PHASE, OR SINGLE PHASE SYSTEM.
- G-12** C.F.M. LISTED IS ACTUAL AIR.
- G-13** SUPPLIERS SHALL REVIEW ALL DRAWINGS AND THE SPECIFICATIONS PRIOR TO SUBMITTING PRICES TO THE CONTRACTOR. ALL QUESTIONS AND DISCREPANCIES SHALL BE BROUGHT TO THE ENGINEERS ATTENTION PRIOR TO BIDDING.
- G-14** CONTRACTOR SHALL THOROUGHLY REVIEW AND SIGN SUBMITTALS FOR COMPLETENESS AND COMPLIANCE TO THE SPECIFICATIONS PRIOR TO ENGINEERS REVIEW. SUPPLIERS SHALL HIGHLIGHT OR MARK ALL INFORMATION REQUIRED TO SHOW COMPLIANCE TO THE SPECIFICATIONS. ALL REQUESTED EXCEPTIONS TO THE SPECIFICATIONS, OR SCHEDULES SHALL BE CLEARLY NOTED AND EXPLAINED. SUBMITTAL REVIEW AND ACCEPTANCE IS FOR DESIGN CONCEPT ONLY, AND DOES NOT AT ANY TIME RELIEVE THE CONTRACTOR OF RESPONSIBILITY TO MEET SPECIFICATIONS, CAPACITIES, OR DESIGN INTENT.
- G-15** ALL MECHANICAL SHALL BE INSTALLED AND CONFORM TO THE 2003 EDITION OF THE IMC AND IPC WITH UTAH ANNOTATIONS COLLEGE REQUIREMENTS.

FOR FINAL REVIEW
NOT FOR CONSTRUCTION


State of Utah
Department of Administrative Services



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PROJECT NAME & ADDRESS

**SNOW COLLEGE
SOUTH
RICHFIELD CAMPUS**

DFCM# 04225710

MARK

DATE

REVISION

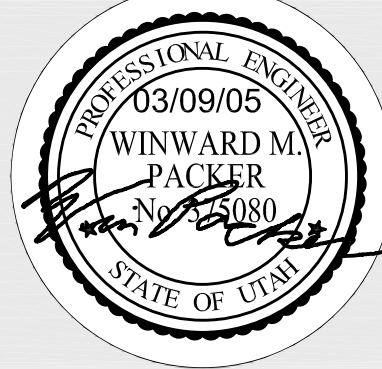
PROJECT MANAGER:
WP

DRAWN BY:
STAFF

CHECKED BY:
SLW

DATE:
03/09/05

WHW JOB NO.:
04036

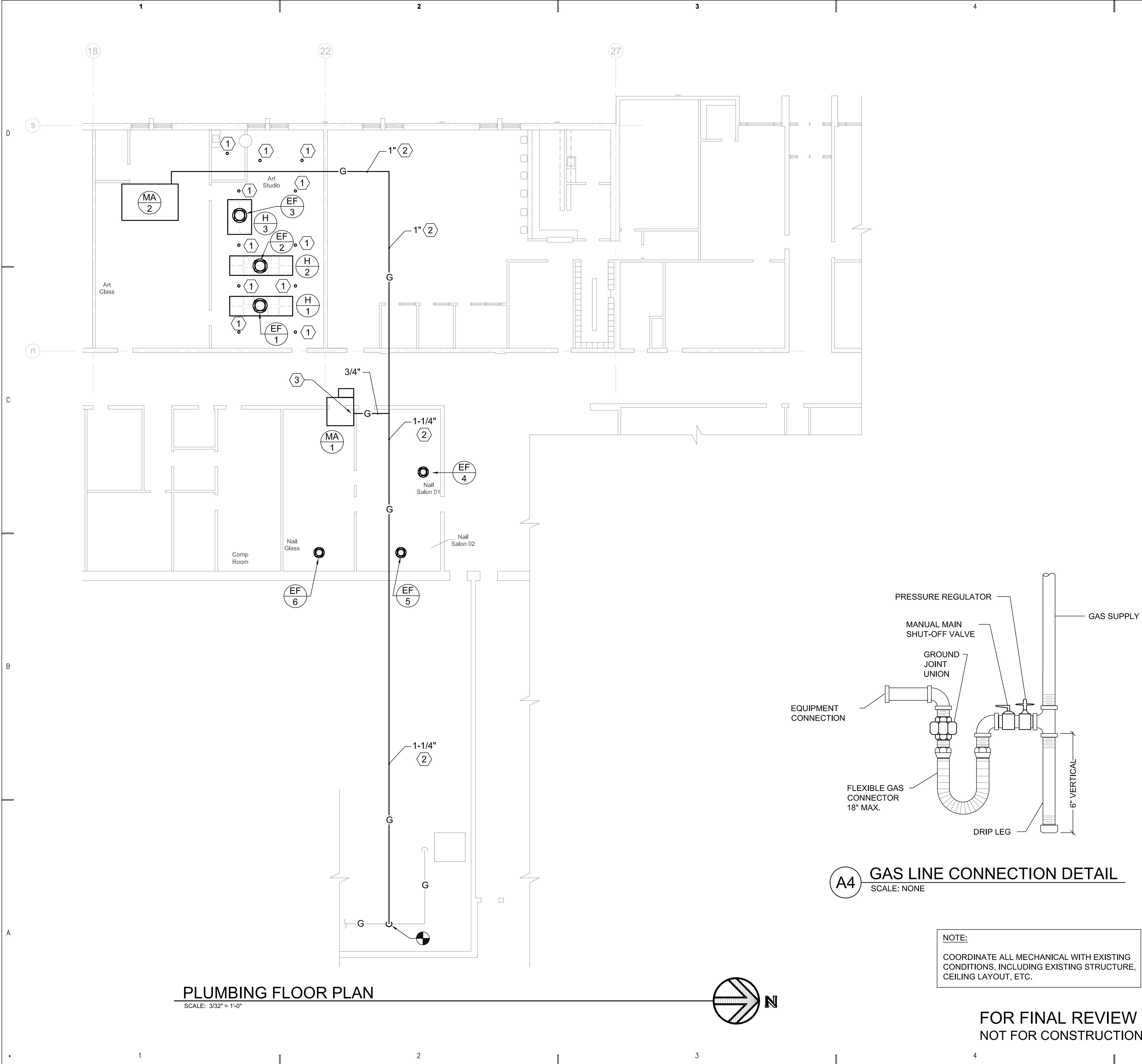


SHEET TITLE

**GENERAL NOTES
AND LEGENDS**

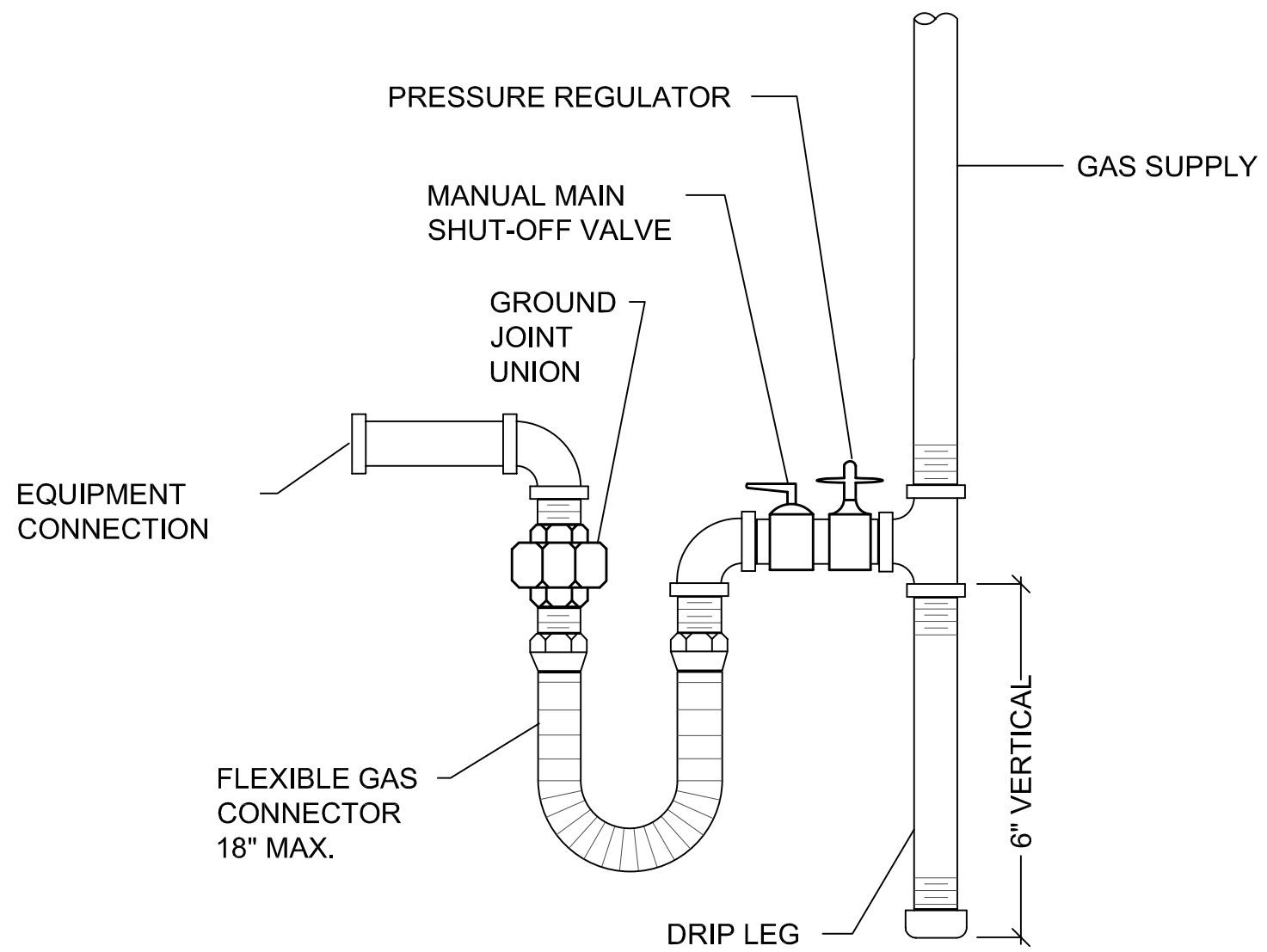
SHEET NO.

M001



PLUMBING FLOOR PLAN

SCALE: 3/32" = 1'-0"



A4 GAS LINE CONNECTION DETAIL
SCALE: NONE

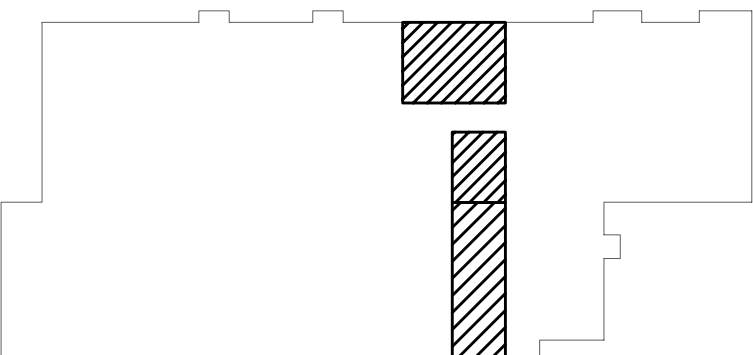
NOTE:
COORDINATE ALL MECHANICAL WITH EXISTING CONDITIONS, INCLUDING EXISTING STRUCTURE, CEILING LAYOUT, ETC.

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SHEET NOTES

- 1 THIS CONTRACTOR SHALL HIRE A LICENSED FIRE PROTECTION SYSTEM DESIGNER AND CONTRACTOR TO RE-DESIGN THE FIRE SPRINKLERS IN THIS AREA, AND PROVIDE NEW HEADS IN THE APPROXIMATE LOCATIONS SHOWN.
- 2 ROUTE 2 PSI GAS PIPING ON ROOF FROM SHOP AREA TO NEW MAKE-UP AIR UNITS. FIELD VERIFY EXACT LOCATION AND PRESSURE OF EXISTING PIPING. COORDINATE WITH OWNER APPROVED ROOFING CONTRACTOR TO PATCH PIPE PENETRATION THROUGH ROOF.
- 3 PROVIDE 2 PSI TO 4 OZ GAS PRESSURE REGULATOR AT MAKE-UP AIR UNIT. PIPE PER DETAIL.

KEY PLAN



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Department of Administrative Services

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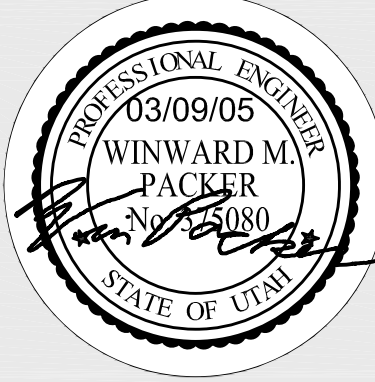
PROJECT NAME & ADDRESS

SNOW COLLEGE SOUTH RICHFIELD CAMPUS

DFCM# 04225710

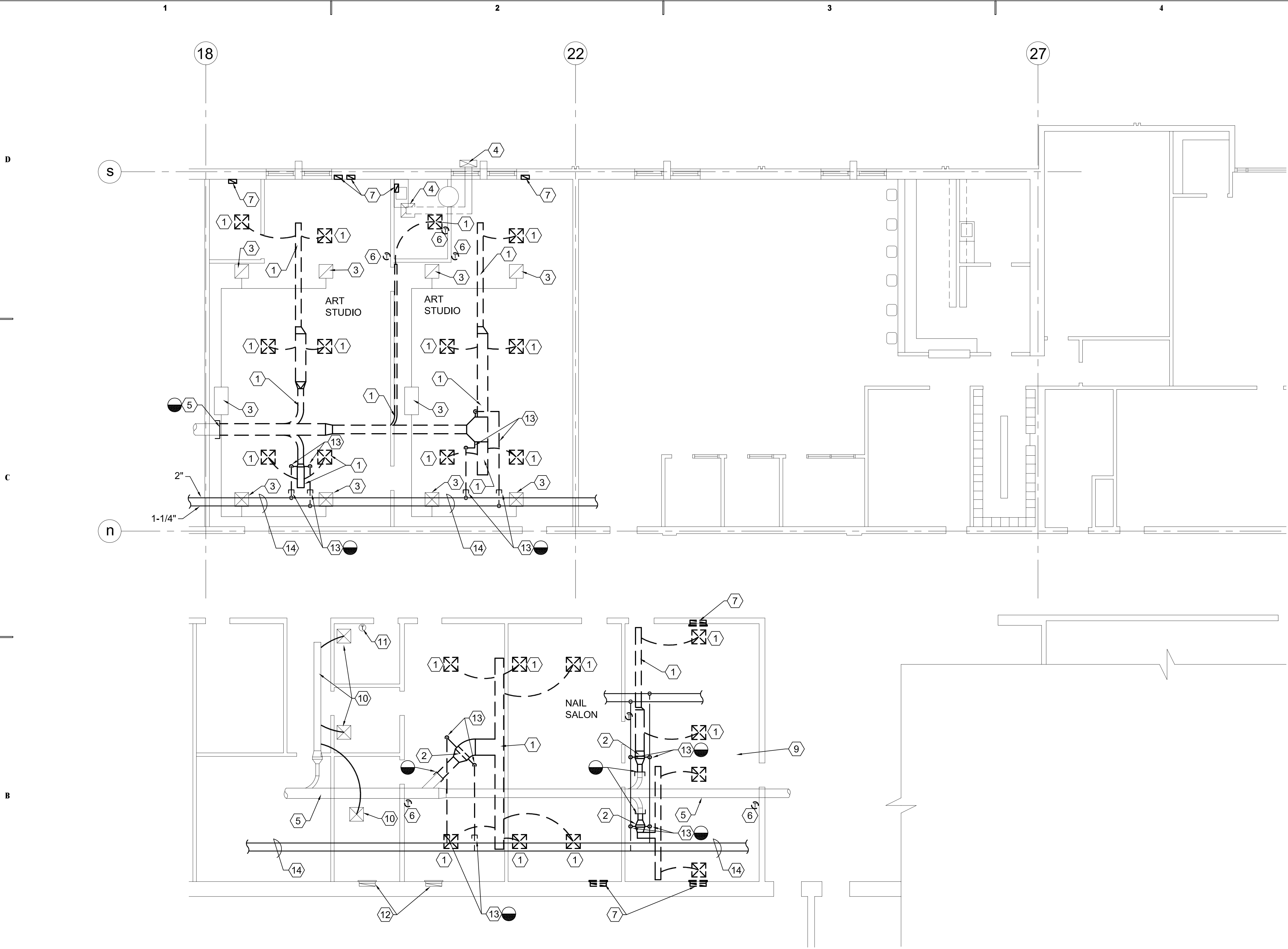
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SLW
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03/09/05
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SHEET TITLE



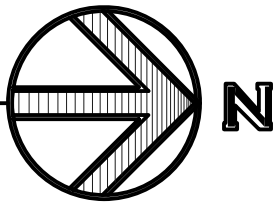
PLUMBING FLOOR PLAN

PE101



MECHANICAL DEMOLITION FLOOR PLAN

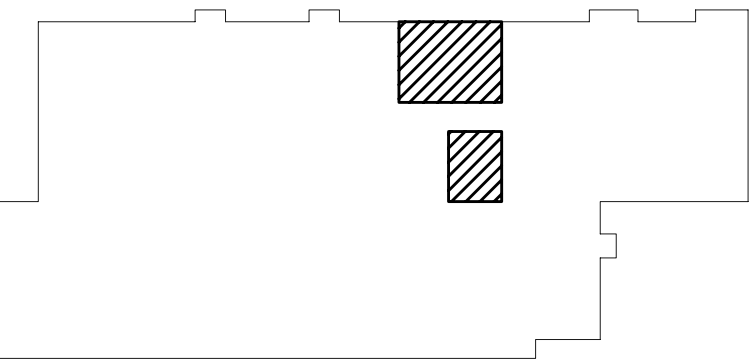
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SHEET NOTES

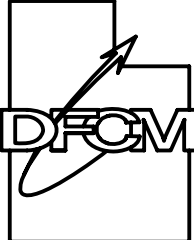
- 1 REMOVE EXISTING SUPPLY DUCT AND DIFFUSERS AS SHOWN.
- 2 REMOVE EXISTING VAV BOX AND CAP EXISTING MEDIUM PRESSURE DUCT AND HOT WATER PIPING.
- 3 EXISTING AIR FILTRATION SYSTEM SHALL REMAIN.
- 4 EXISTING EXHAUST DUCT SHALL REMAIN.
- 5 EXISTING MEDIUM PRESSURE SUPPLY SHALL REMAIN.
- 6 REMOVE EXISTING THERMOSTAT.
- 7 REMOVE EXISTING RETURN GRILLES AND CAP.
- 8 NOT USED.
- 9 REMOVE EXISTING WALL. PATCH AND REPAIR FLOOR AND CEILING.
- 10 EXISTING SUPPLY DUCT SHALL REMAIN.
- 11 EXISTING THERMOSTAT SHALL REMAIN.
- 12 EXISTING RETURN AIR GRILLE AND DROP TO TUNNEL SHALL REMAIN.
- 13 REMOVE EXISTING HOT WATER PIPING TO VAV BOX AND CAP A BRANCH TAKE-OFF.
- 14 EXISTING HOT WATER SUPPLY AND RETURN PIPING SHALL REMAIN.

KEY PLAN



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Department of Administrative Services



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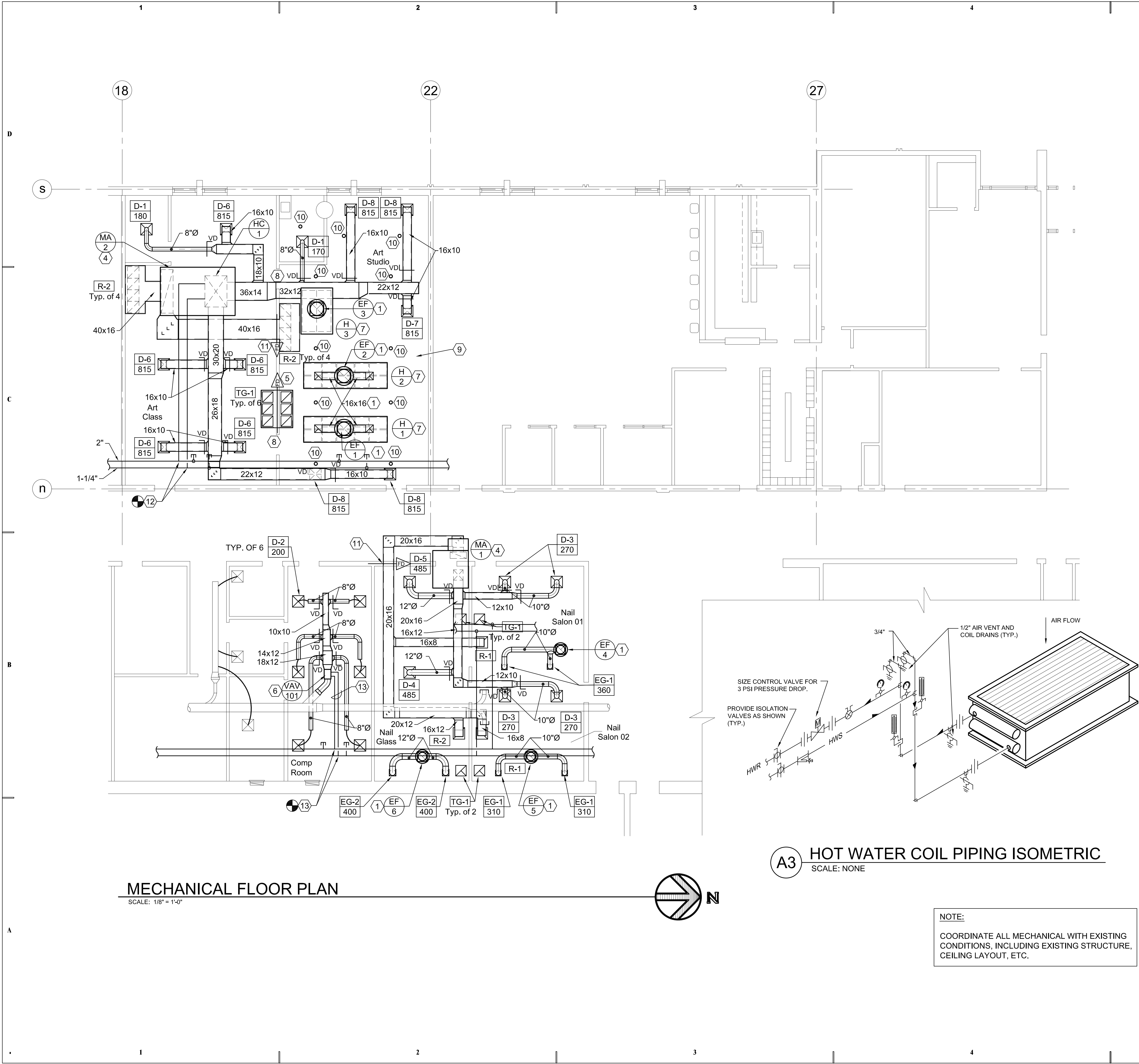
RICHFIELD, UTAH

MARK	DATE	REVISION

PROJECT MANAGER: WP	
DRAWN BY: STAFF	
CHECKED BY: SLW	
DATE: 03/09/05	
WHW JOB NO.: 04036	

SHEET TITLE
**MECHANICAL DEMOLITION
FLOOR PLAN**

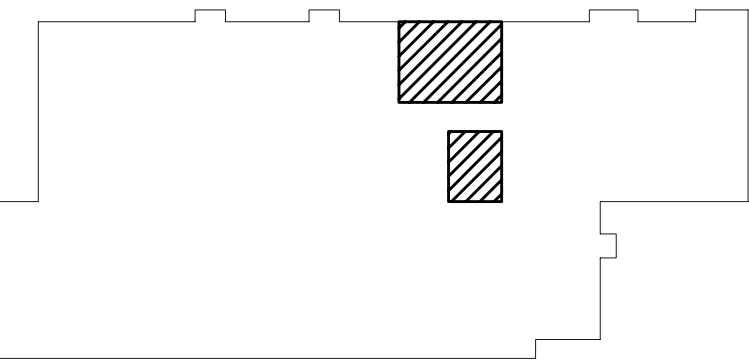
SHEET NO.
MD101



SHEET NOTES

- 1 PROVIDE ROOF MOUNTED EXHAUST FAN. CONNECT EXHAUST DUCTWORK TO NEW HOODS. SEE SCHEDULES AND DETAILS SHEET.
- 2 PROVIDE CAPTURE HOOD FOR AIR BRUSH TABLES. SEE SCHEDULES AND DETAILS SHEET.
- 3 PROVIDE CAPTURE HOOD FOR LACQUER TABLE. SEE SCHEDULES AND DETAILS.
- 4 PROVIDE ROOF MOUNTED INDIRECT FIRED MAKE-UP AIR UNIT WITH PACKAGED COOLING. PROVIDE WITH VIBRATION ISOLATION AND SEISMIC ROOF CURB, RETURN AIR BY-PASS, ETC. SEE SCHEDULES AND DETAILS SHEET. INSTALL TO SPAN AS MANY ROOF JOISTS AS POSSIBLE. PROVIDE ADDITIONAL STRUCTURAL BRACING AND HEADER BENEATH.
- 5 PROVIDE CEILING TRANSFER GRILLES. PROVIDE 32"x16" TRANSFER AIR OPENING IN BLOCK WALL ABOVE CEILING AND 32"x16" FIRE DAMPER.
- 6 PROVIDE NEW VAV BOX WITH HOT WATER COIL. RE-CONNECT TO EXISTING DUCT AND PIPING. SEE SCHEDULES AND DETAILS SHEET.
- 7 PROVIDE NEW VENTILATION CAPTURE HOOD. SUPPORT FROM STRUCTURE PER MANUFACTURERS RECOMMENDATIONS. RE-LOCATE AND RE-CONFIGURE EXISTING AIR PIPING, AIR HOSES, ANY OTHER UTILITIES AS NECESSARY TO ACCOMMODATE NEW HOODS.
- 8 PROVIDE AUTOMATIC ELECTRO MECHANICAL DOOR CLOSERS FOR THE TWO DOORS SEPERATING THE ART STUDIO AND ART CLASSROOM. POWER AND FIRE ALARM INTERLOCK FOR NEW CLOSERS.
- 9 REPLACE EXISTING CEILING TILES IN ART STUDIO TO MATCH EXISTING. MODIFY GRID AS NECESSARY TO ACCOMMODATE NEW HOODS AND EQUIPMENT.
- 10 SEE SHEET PE101 FOR FIRE SPRINKLER MODIFICATIONS.
- 11 PROVIDE FIRE DAMPER WHERE RETURN DUCT CROSSES WALL.
- 12 PROVIDE HOT WATER PIPING TO NEW HEATING COIL & MAKE UP AIR UNIT MA-2. PIPE PER DETAIL A3 THIS SHEET. TIE INTO EXISTING HOT WATER SUPPLY & RETURN PIPING. FIELD VERIFY.
- 13 PROVIDE HEATING HOT WATER PIPING TO NEW VAV BOX. TIE INTO EXISTING PIPING. FIELD VERIFY. PIPE PER DETAIL C1/ME502.

KEY PLAN



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PROJECT MANAGER:
WP

DRAWN BY:
STAFF

CHECKED BY:
SLW

DATE:
03/09/05

WHW JOB NO.:
04036

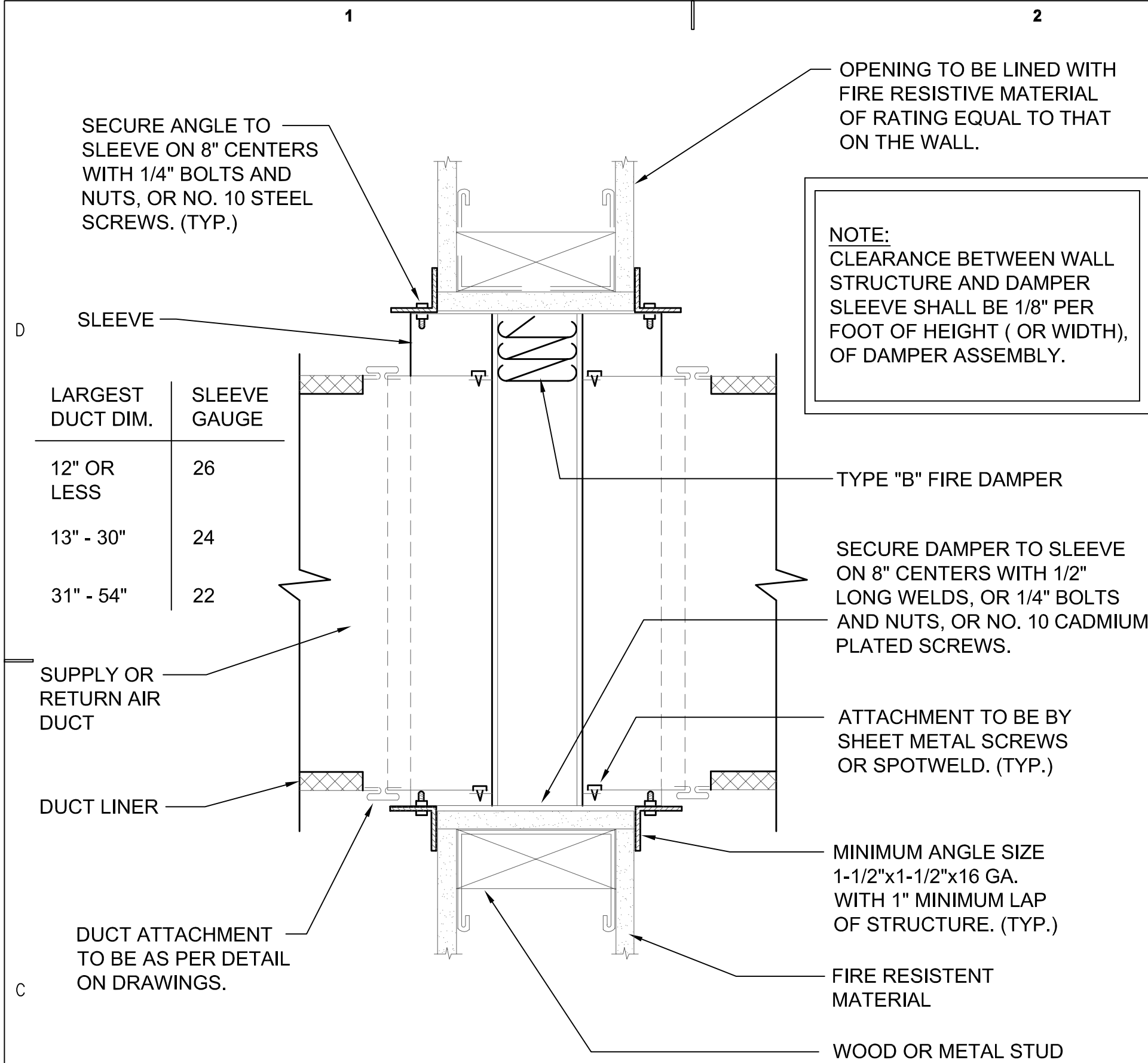
SHEET TITLE

PROFESSIONAL ENGINEER
03/09/05
WINWARD M. PACKER
STATE OF UTAH

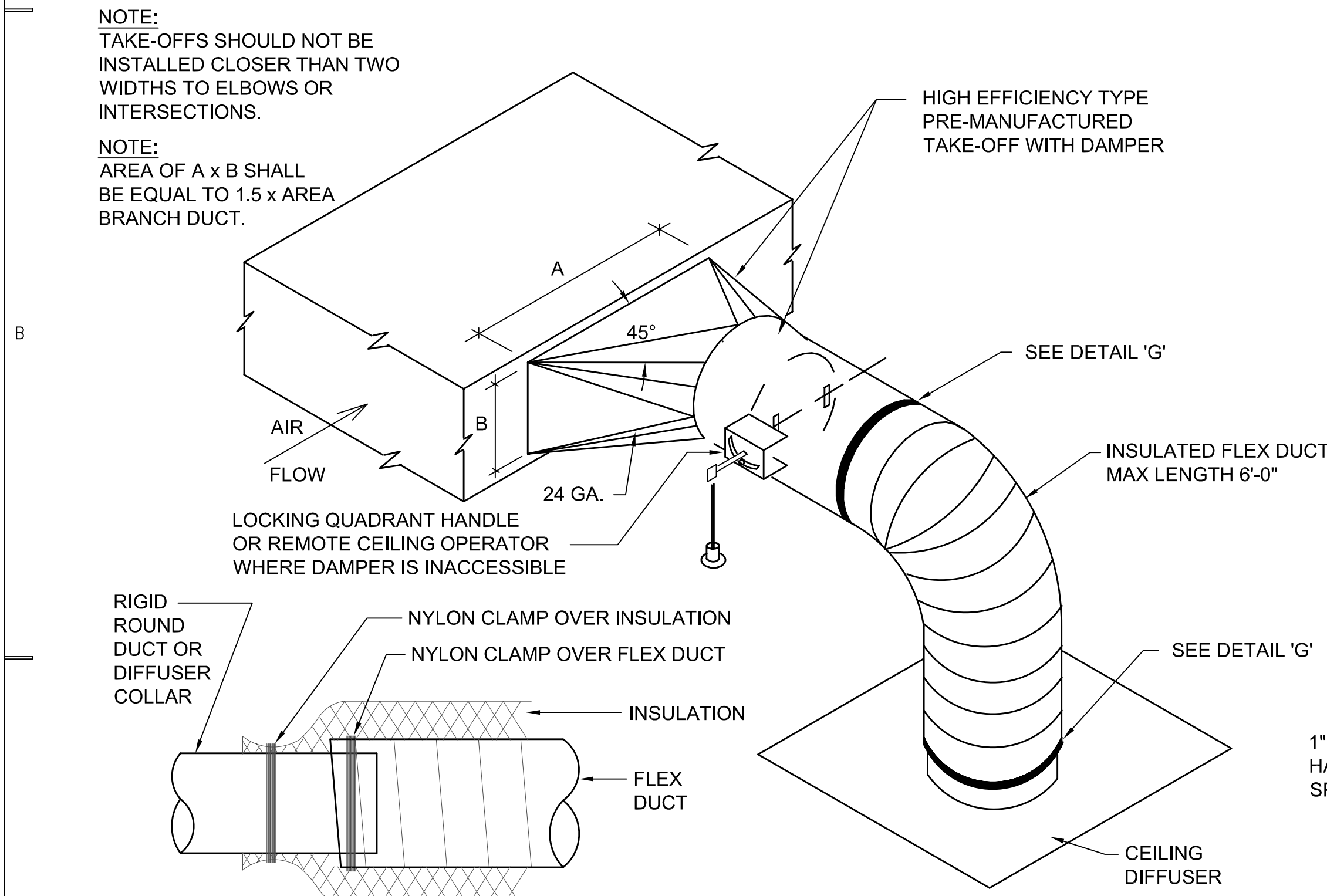
MECHANICAL
FLOOR PLAN

SHEET NO.

ME101

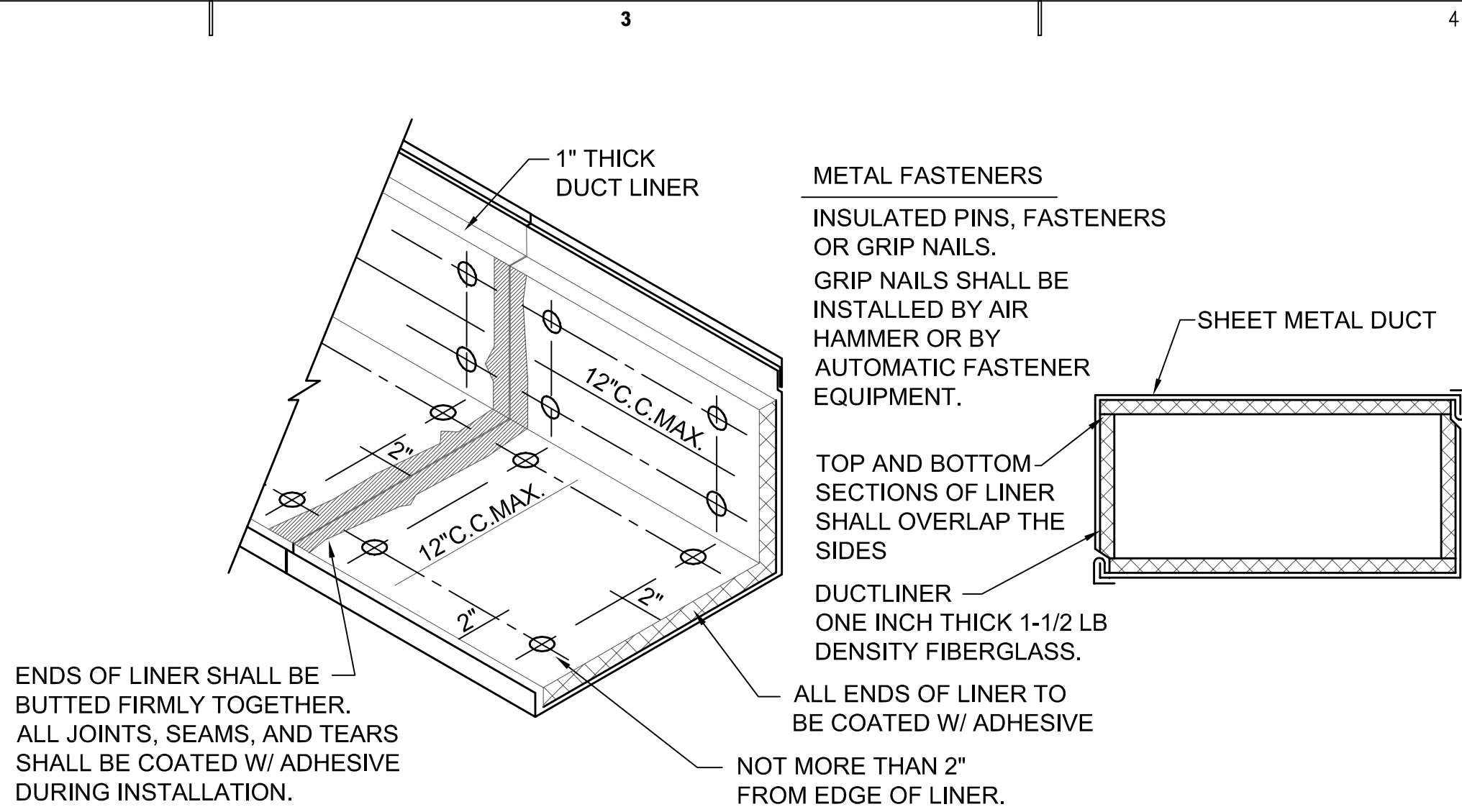


C1 LOW PRESSURE DUCT FIRE DAMPER INSTALLATION
SCALE: NONE

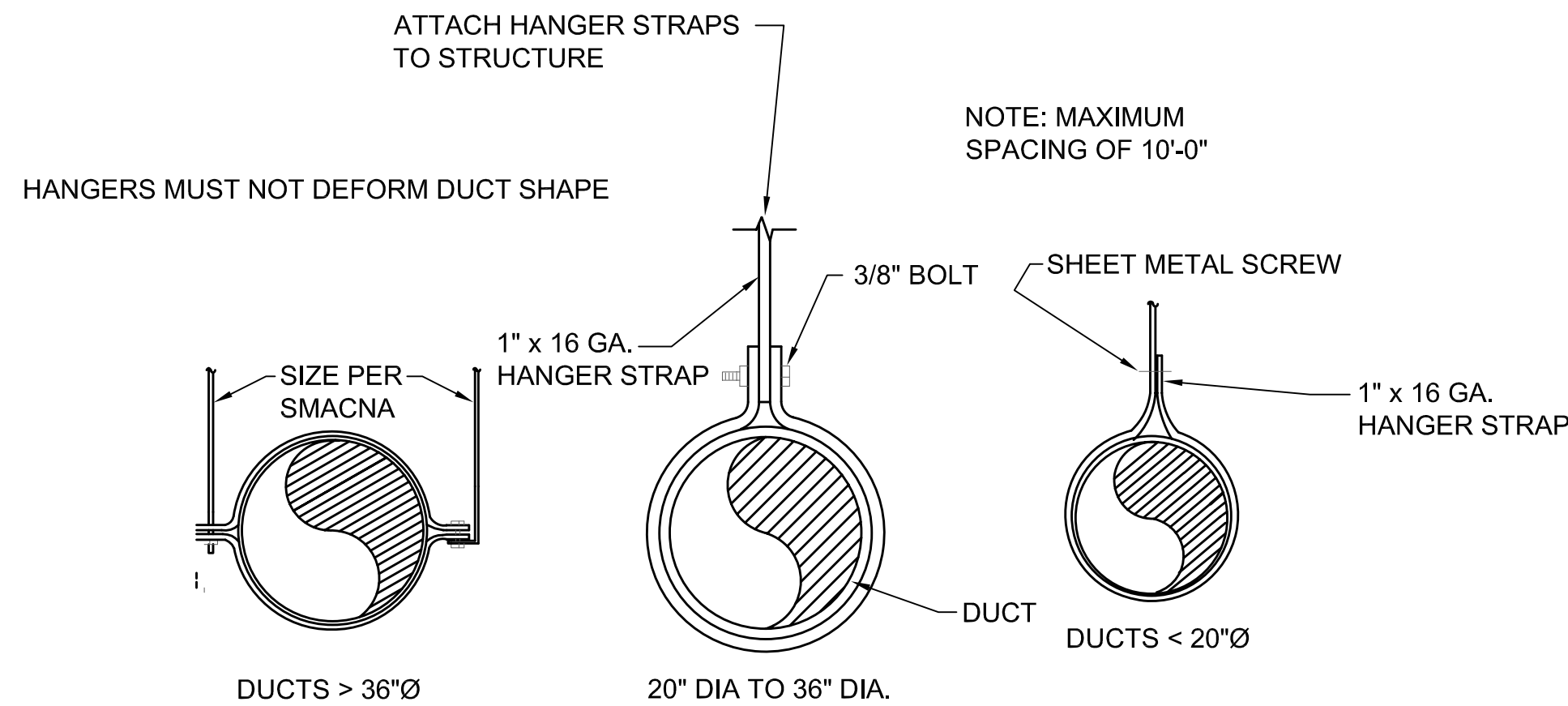


G DETAIL
SCALE: NONE

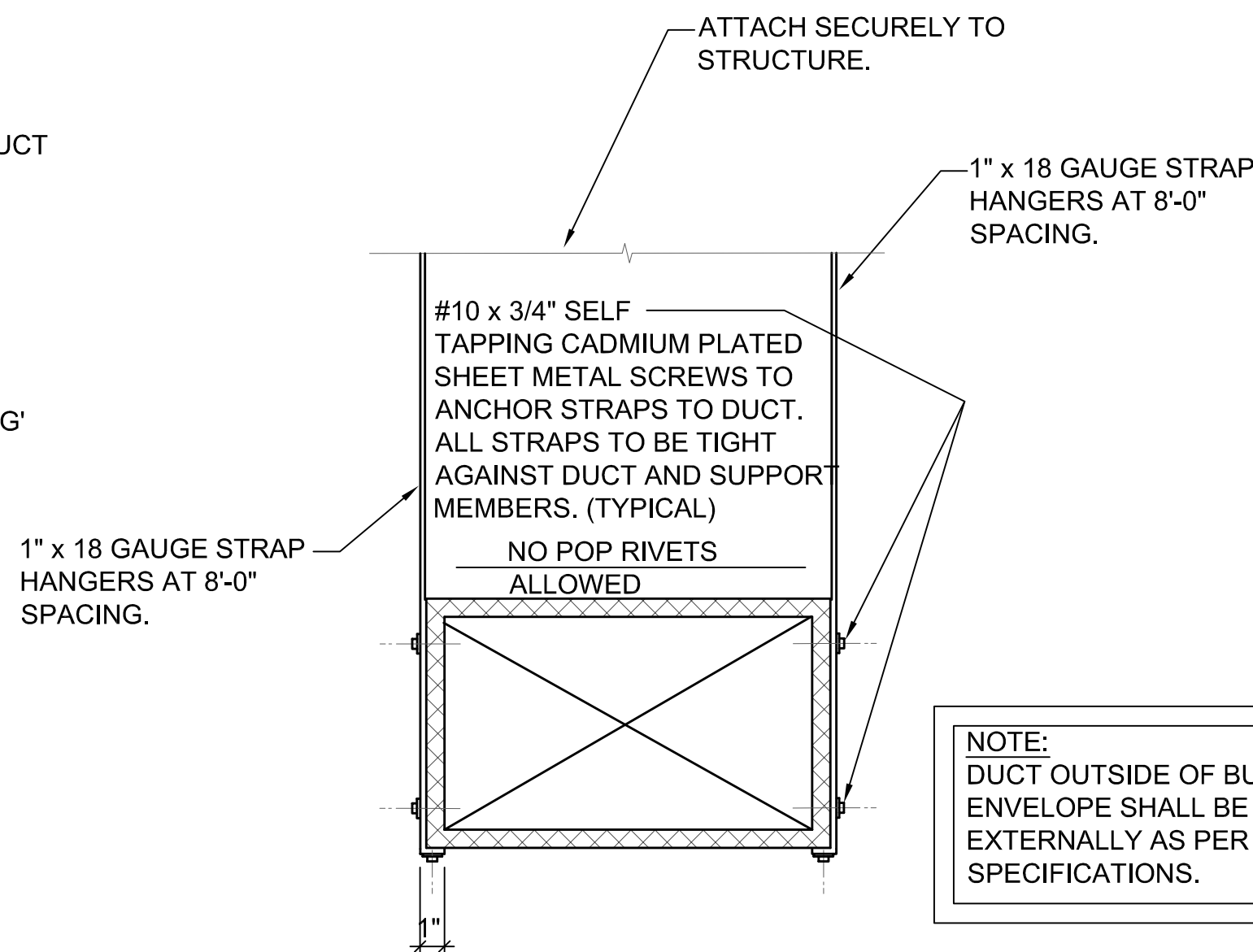
A1 SQUARE-TO-ROUND TAKE-OFF DETAIL
SCALE: NONE



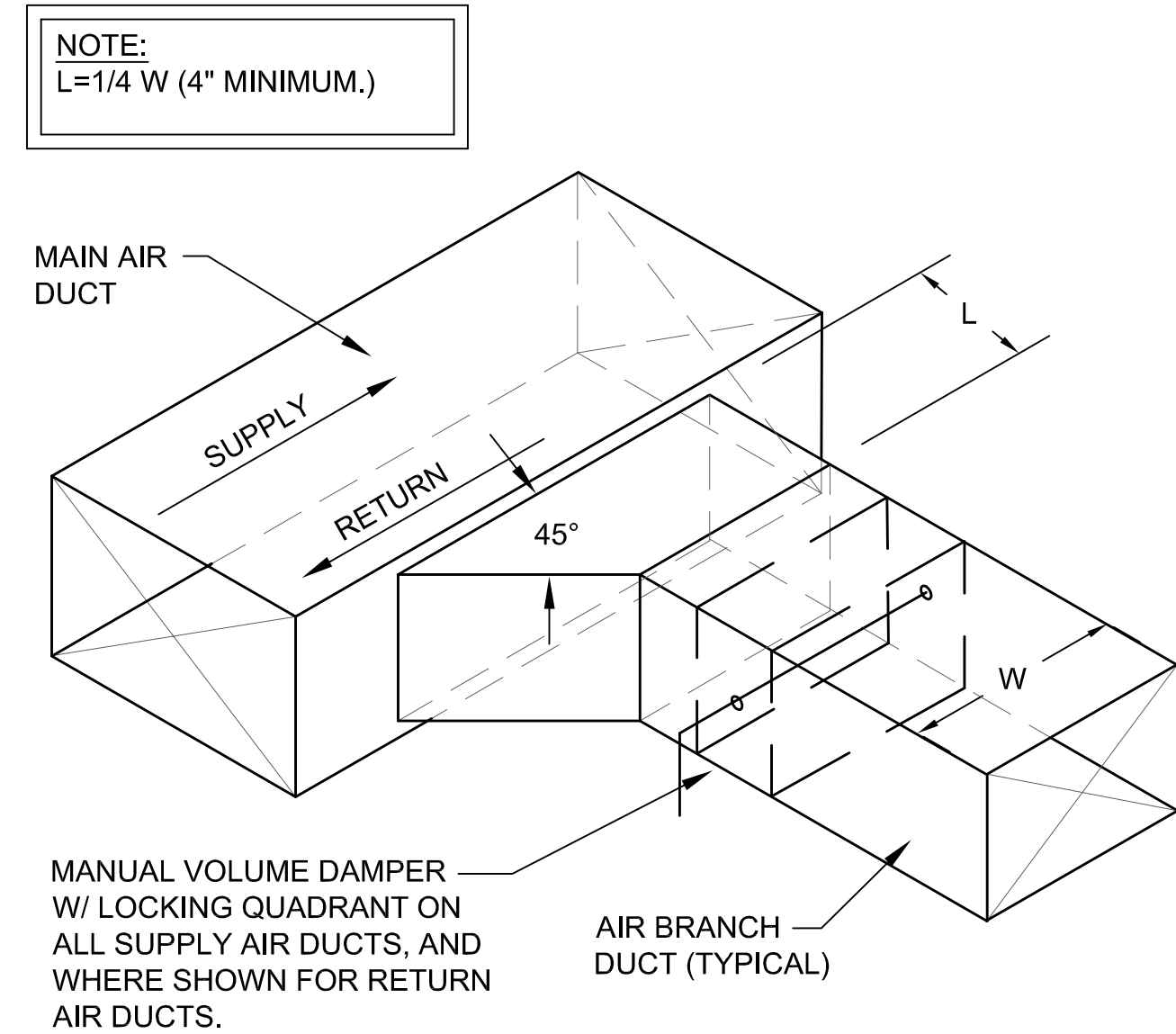
C3 DUCT LINER DETAIL
SCALE: NONE



B3 ROUND DUCT SUPPORT DETAIL
SCALE: NONE



A3 DUCT STRAP HANGER DETAIL
SCALE: NONE



C4 BRANCH DUCT TAKE-OFF & DAMPER DETAIL
SCALE: NONE

DUCT DIAMETER IN INCHES	MAXIMUM 2" W.G. STATIC POSITIVE		MAXIMUM 2" W.G. STATIC NEGATIVE	
	SPIRAL SEAM GAUGE	LONGITUDINAL SEAM GAUGE	SPIRAL SEAM GAUGE	LONGITUDINAL SEAM GAUGE
3 thru 8	28	28	28	24
9 thru 14	28	26	26	24
15 thru 26	26	24	24	22
27 thru 36	24	22	22	20
37 thru 50	22	20	20	18

B4 LOW PRESSURE ROUND DUCT CONSTRUCTION DETAIL
SCALE: NONE

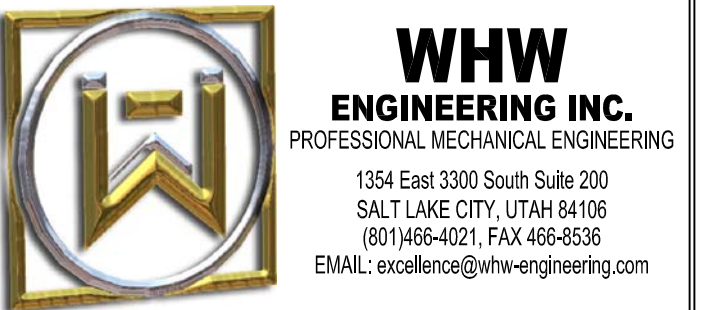
DIMENSION OF LONGEST SIDE, INCHES	SHEET METAL GAGE (ALL FOUR SIDES)	MINIMUM REINFORCING ANGLE SIZE AND MAXIMUM LONGITUDINAL SPACING BETWEEN TRANSVERSE JOINTS &/OR INTERMEDIATE REINFORCING	TRANSVERSE REINFORCING (1)					
			AT JOINTS					
			MIN. H. IN.	DRIVE SLIP PLAIN S SLIP	HEMMED S SLIP	ALTER'NT BAR SLIP	REIN-FORCED BAR SLIP	
UP THRU 12	26	NONE REQUIRED	1	26	26	24	24	
13 - 18	24	NONE REQUIRED	1	24	24	24	24	
19 - 30	24	1"X1"X1/8" @ 60 IN	1	-	24	24	24	
31 - 36	22	1"X1"X1/8" @ 60 IN	1	-	-	22	22	

1. TRANSVERSE REINFORCING SIZE IS DETERMINED BY DIMENSION OF SIDE TO WHICH ANGLE IS APPLIED.

A4 DUCT CONSTRUCTION DETAIL
SCALE: NONE

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PROJECT NAME & ADDRESS

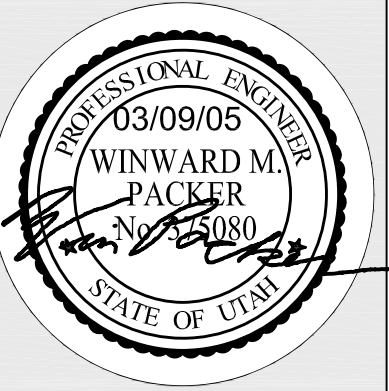
**SNOW COLLEGE
SOUTH
RICHFIELD CAMPUS**

DFCM# 04225710

RICHFIELD, UTAH

MARK	DATE	REVISION

PROJECT MANAGER:
WP
DRAWN BY:
STAFF
CHECKED BY:
SLW
DATE:
03/09/05
WHW JOB NO.:
04036
SHEET TITLE

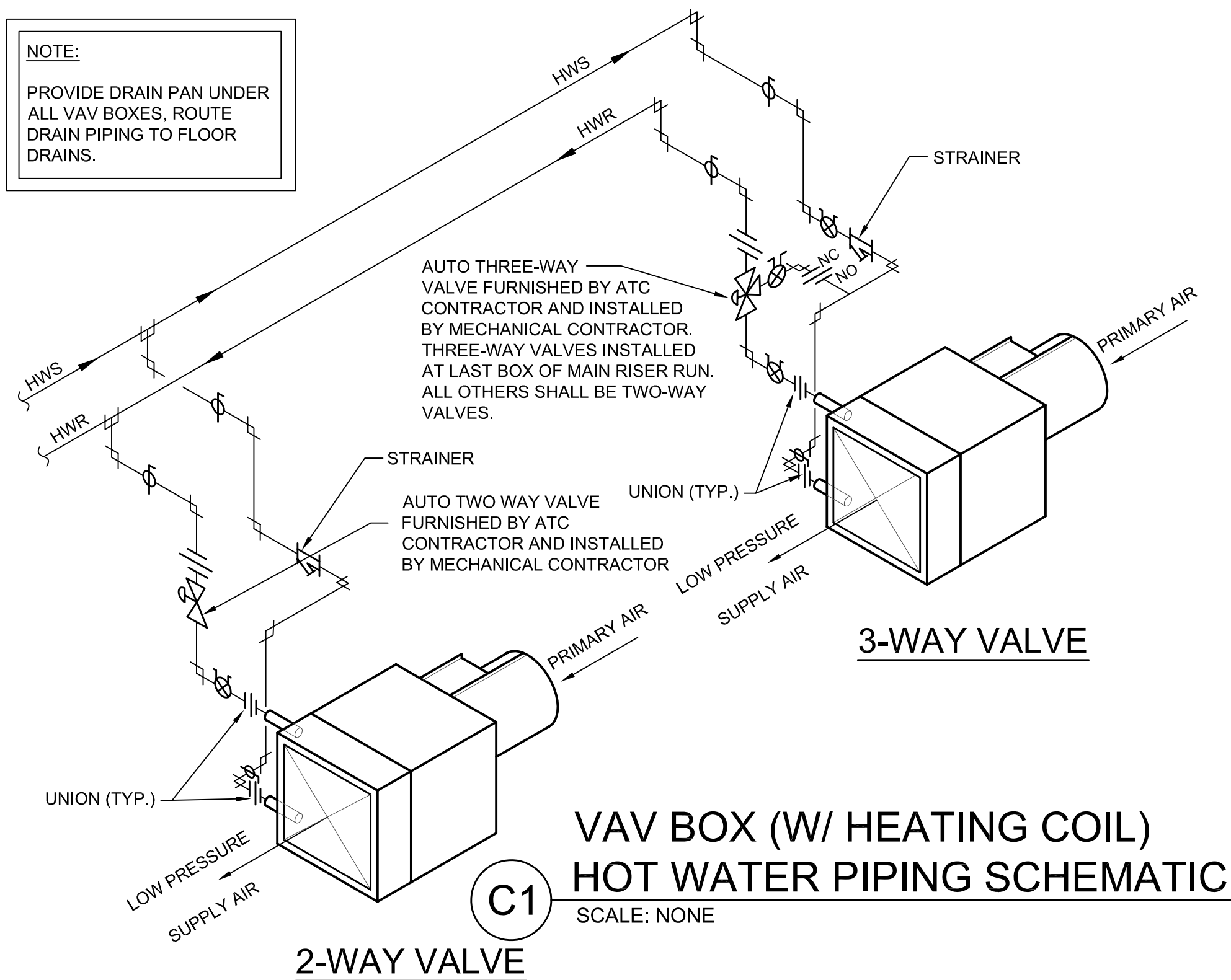


**MECHANICAL
DETAILS**

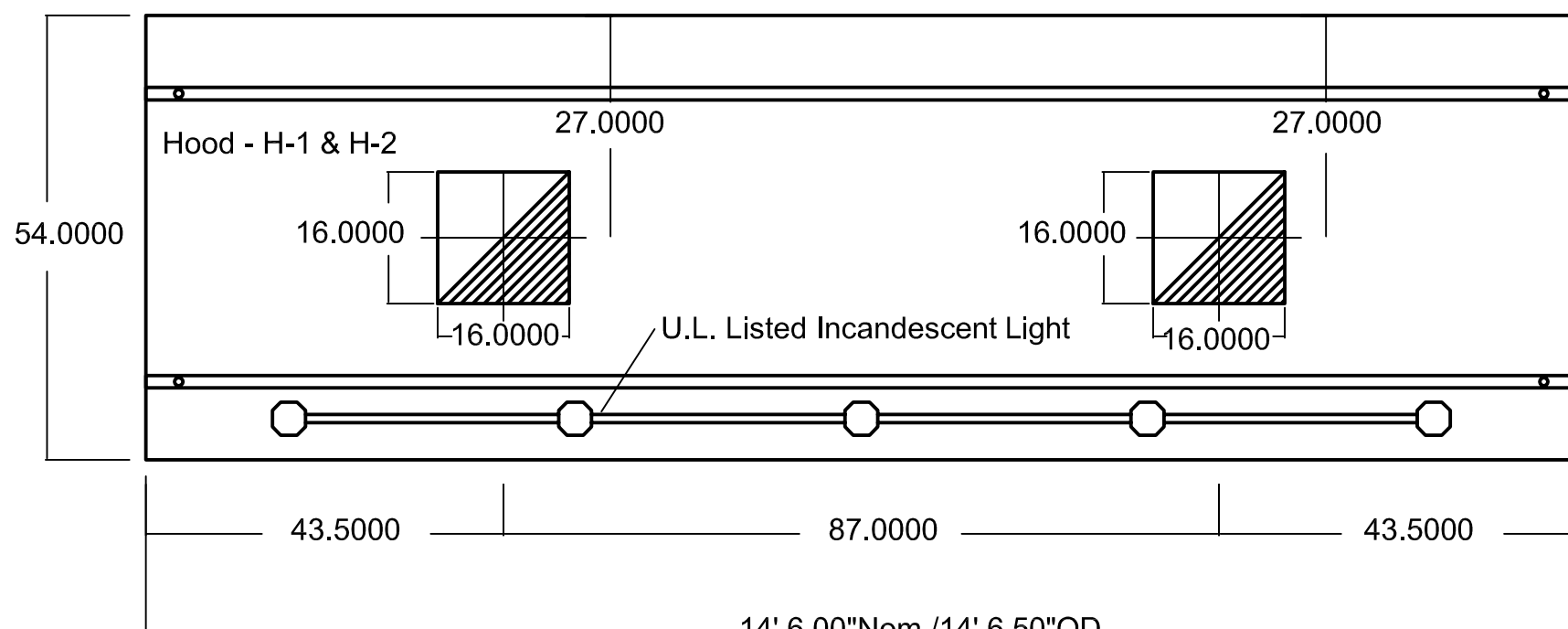
SHEET NO.

ME501

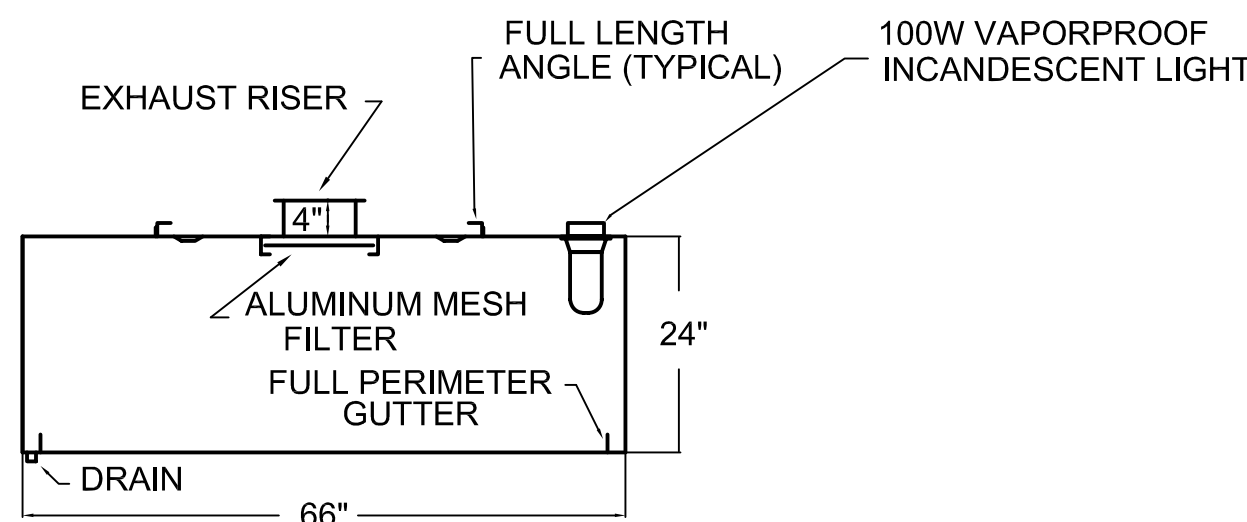
NOTE:
PROVIDE DRAIN PAN UNDER ALL VAV BOXES. ROUTE DRAIN PIPING TO FLOOR DRAINS.



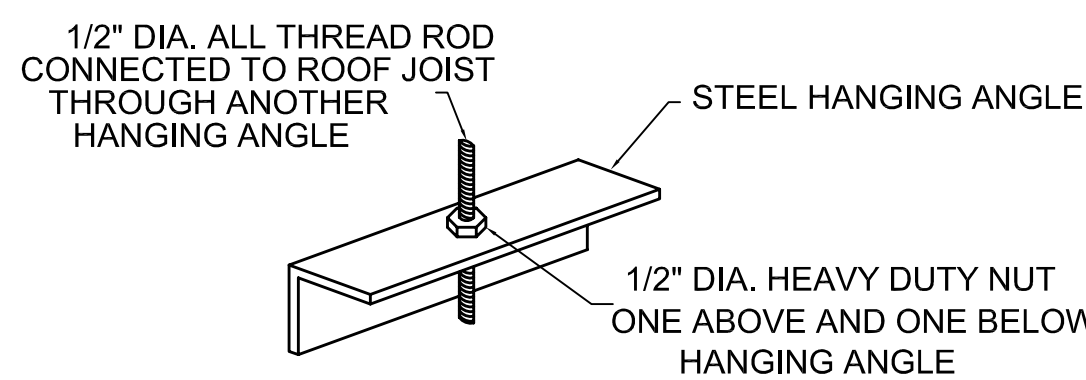
**VAV BOX (W/ HEATING COIL)
HOT WATER PIPING SCHEMATIC**
SCALE: NONE



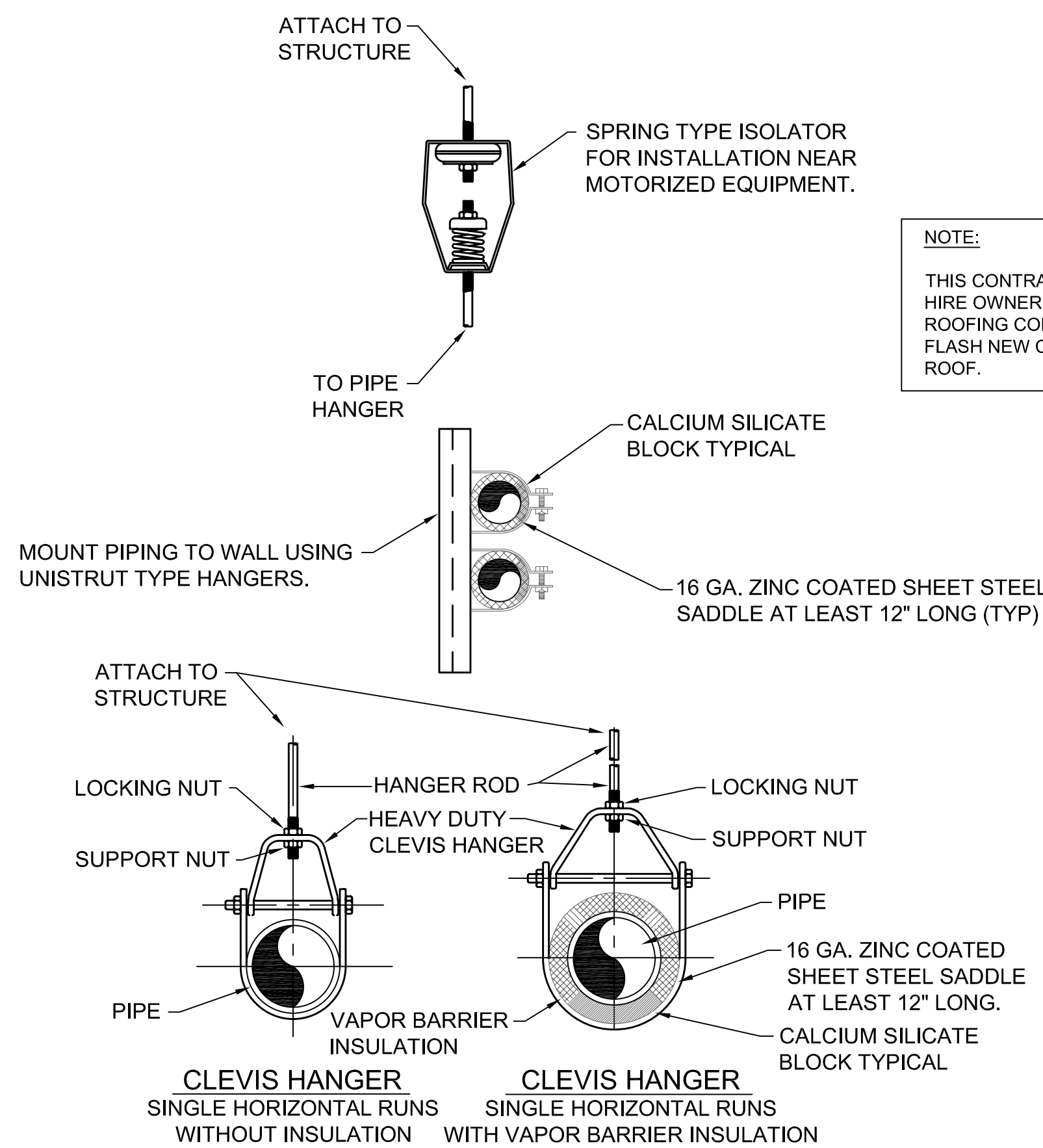
PLAN VIEW - 14' 6.00" LONG 5424VH1-G



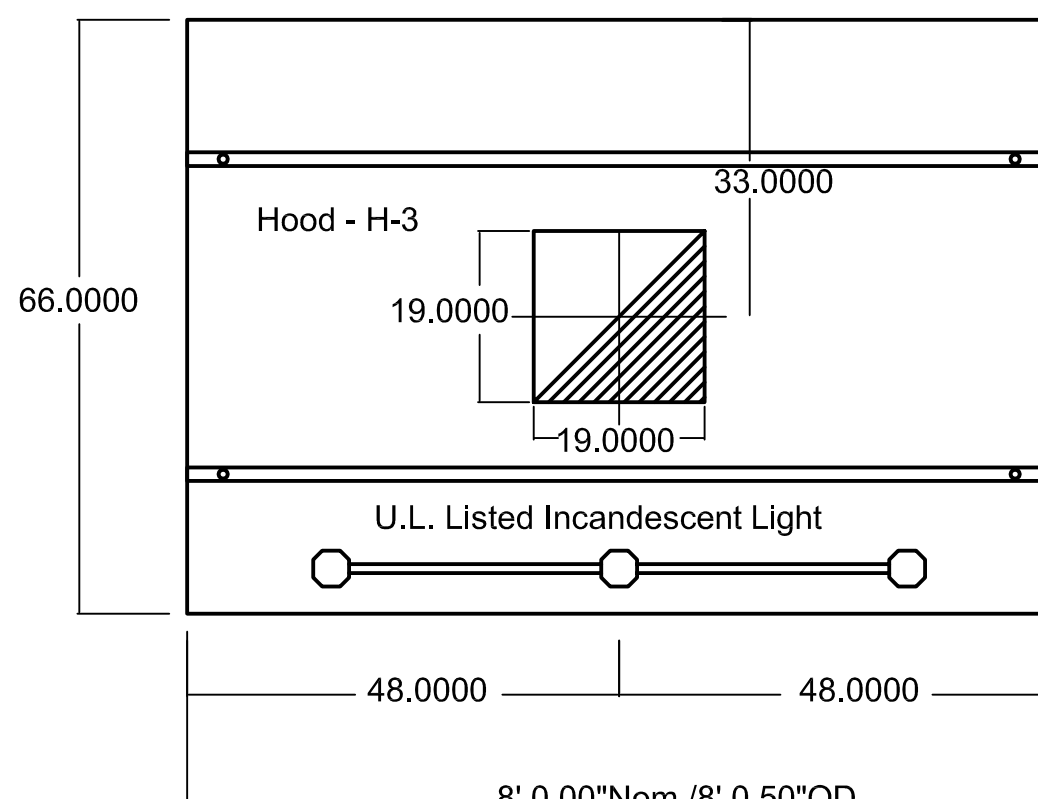
HANGING ANGLE DETAIL



**SECTION VIEW - MODEL 6624-VH1
WITH FULL PERIMETER GUTTER**

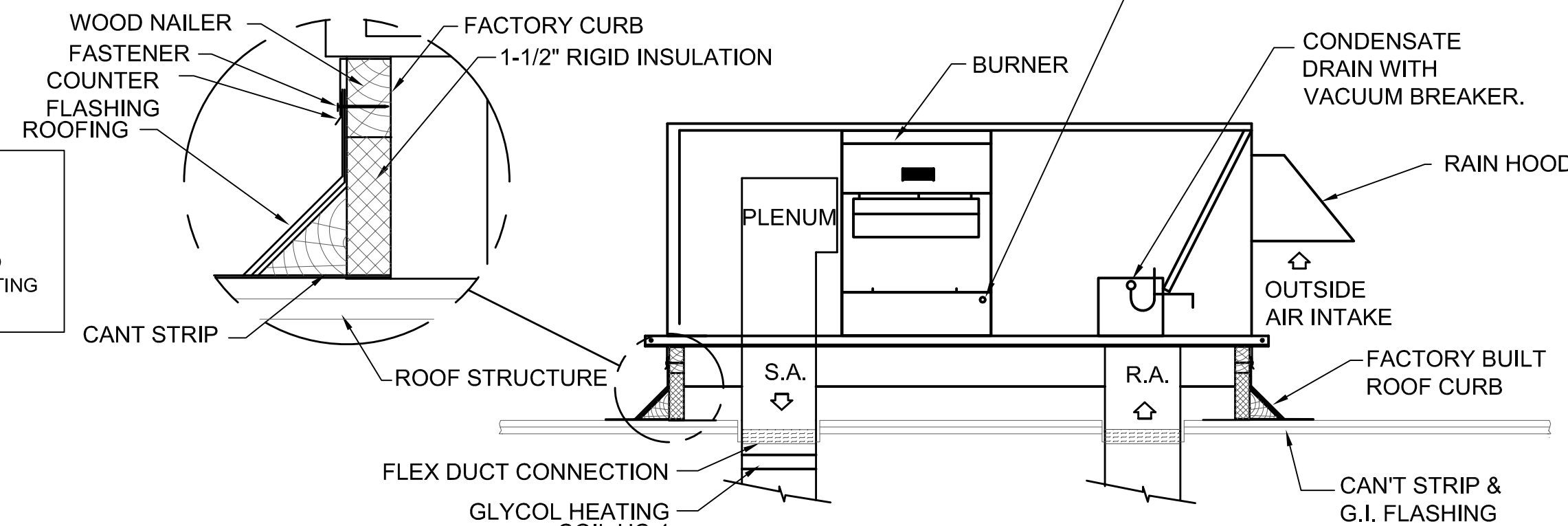


C3 PIPE HANGER DETAIL
SCALE: NONE

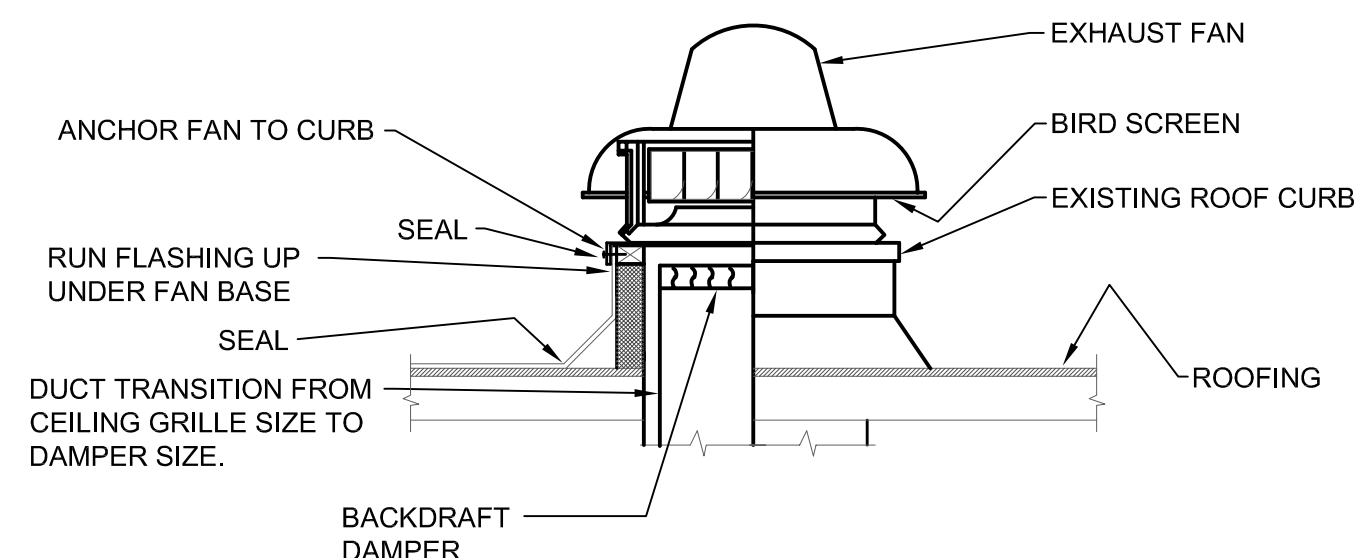


PLAN VIEW - 8' 0.00" LONG 6624VH1-G

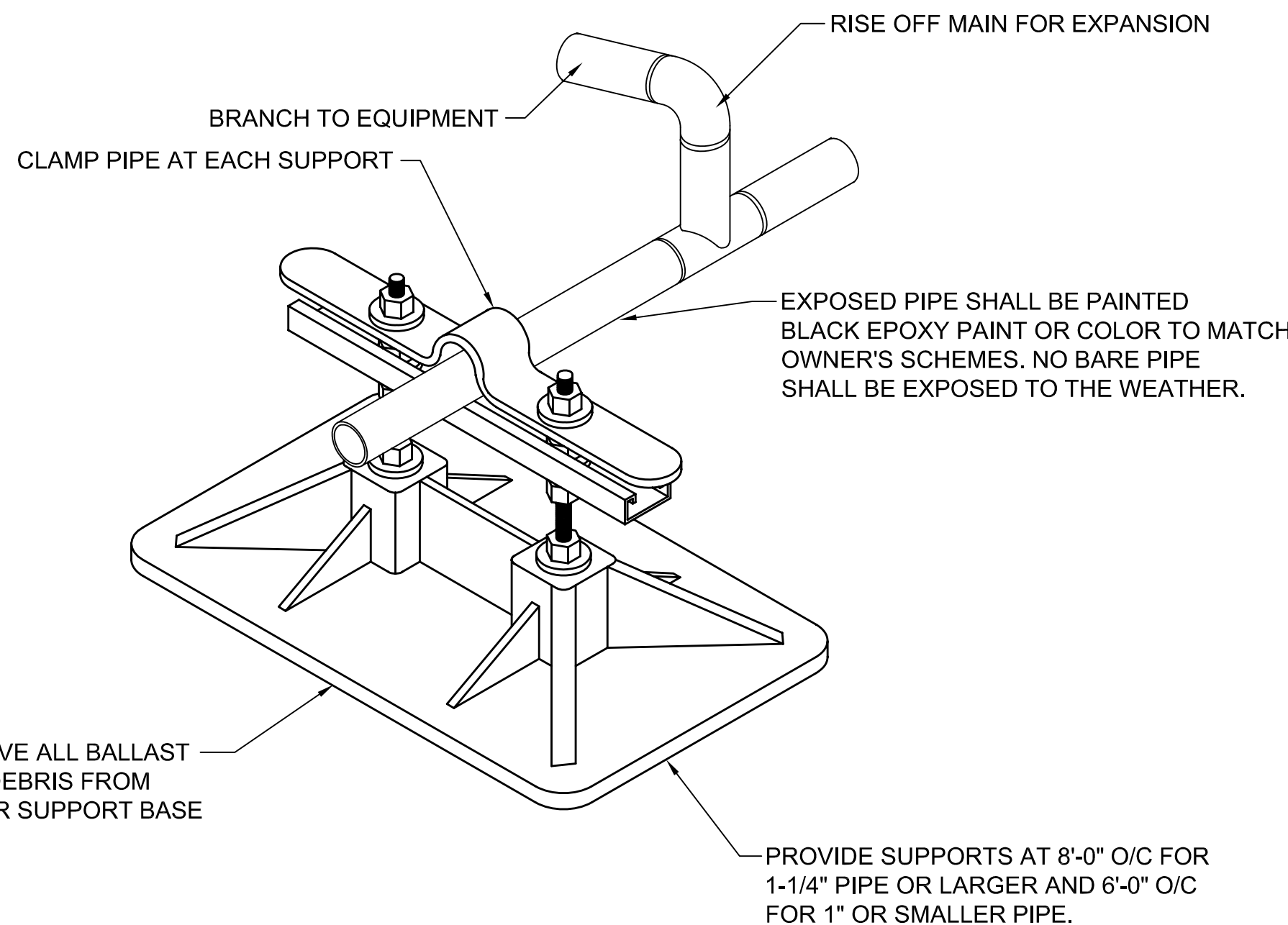
NOTE:
THIS CONTRACTOR SHALL HIRE OWNER APPROVED ROOFING CONTRACTOR TO FLASH NEW CURB TO EXISTING ROOF.



A4 MAKE-UP AIR UNIT WITH EVAPORATIVE COOLING DETAIL
SCALE: NONE
**FOR FINAL REVIEW
NOT FOR CONSTRUCTION**

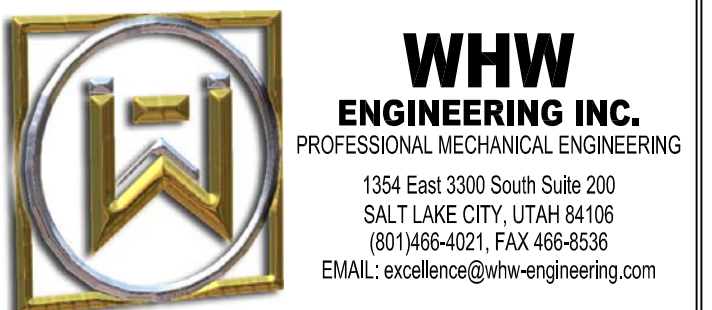


D4 ROOF MOUNTED EXHAUST FAN DETAIL
SCALE: NONE



B4 ROOF PIPING SUPPORT DETAIL
SCALE: NONE

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PROJECT NAME & ADDRESS

**SNOW COLLEGE
SOUTH
RICHFIELD CAMPUS**

DFCM# 04225710

RICHFIELD, UTAH

MARK	DATE	REVISION

PROJECT MANAGER: WP
DRAWN BY: STAFF
CHECKED BY: SLW
DATE: 03/09/05
WHW JOB NO.: 04036
SHEET TITLE:



**MECHANICAL
DETAILS**

SHEET NO.

ME502

D

C

B

A

DIFFUSER SCHEDULE									
SYMBOL	TYPE	MAX CFM ②	FACE SIZE	NECK SIZE	CEILING TYPE ①	BLOW	PATTERN	AIR DIST./SIDE	
								A (%)	B (%)
<div>D-1</div> <div>CFM</div>	CEILING	200	9x9	8"	24x24 LAY-IN	4-WAY		25	25
<div>D-2</div> <div>CFM</div>	CEILING	200	9x9	8"	24x24 LAY-IN	3-WAY		31	38
<div>D-3</div> <div>CFM</div>	CEILING	270	12x12	10"	24x24 LAY-IN	3-WAY		31	38
<div>D-4</div> <div>CFM</div>	CEILING	485	15x15	12"	24x24 LAY-IN	4-WAY		?	?
<div>D-5</div> <div>CFM</div>	CEILING	485	15x15	12"	24x24 LAY-IN	3-WAY		31	38
<div>D-6</div> <div>CFM</div>	CEILING	975	22x22	22x22	24x24 LAY-IN	4-WAY		25	25
<div>D-7</div> <div>CFM</div>	CEILING	975	22x22	22x22	24x24 LAY-IN	3-WAY		31	38
<div>D-8</div> <div>CFM</div>	CEILING	975	22x22	22x22	24x24 LAY-IN	2-WAY		25	25

- ① PROVIDE LAY-IN CEILING AND BORDER / MODULE AS REQUIRED. SEE ARCHITECTURAL CEILING PLANS.
- ② MAXIMUM NC 25 AT CFM LISTED.

VAV BOX SCHEDULE																
SYMBOL	SERVES	INLET DIA. (IN)	INLET VEL. (FPM)	COOLING			HEATING (40° DELTA T)							NC LEVEL	MANUFACTURER & MODEL #	
				MAX CFM	MIN CFM	MAX APD (IN)	COIL EAT	COIL LAT	MAX CFM	COIL MBTUH	FLOW GPM	EWT	(FT) PD			ROWS
<div>VAV</div> <div>101</div>	COMPUTER ROOM	12"	?	1200	400	0.16	55	80	850	24.1	2	180	0.56	1	21	PRICE SDV-12

HOT WATER COIL SCHEDULE											
SYMBOL	SIZE	C.F.M.	MBH	EAT	LAT	AIR PRESS. IN W.G.	PRESS. DROP FT. HEAD	G.P.M	EWT	LWT	REMARKS
<div>HWC</div> <div>1</div>	45"x60"	8500	158	55	75	0.20	5.0	8.0	180	140	

- ① 500 FPM MAX. FACE VELOCITY
- ② COIL SHALL BE PROVIDED BY THE SAME SUPPLIER AS THE ROOFTOP MAKE-UP AIR UNIT. SEE SPECIFICATIONS.

HOOD INFORMATION									
HOOD NO.	MODEL	LxW	TOTAL EXH. CFM	EXHAUST PLENUM					HOOD CONSTRUCTION
				RISER(S)					
				WIDTH	LENG.	DIA.	CFM	S.P.	
<div><div>H</div><div>1</div></div>	CAPTIVE AIRE 5424 VH1-G	14.5'x4.5'	3300	16	16		1650	-0.50	304SS
				16	16		1650	-0.50	
<div><div>H</div><div>2</div></div>	CAPTIVE AIRE 5424 VH1-G	14.5'x4.5'	3300	16	16		1650	-0.50	304SS
				16	16		1650	-0.50	
<div><div>H</div><div>3</div></div>	CAPTIVE AIRE 6624 VHI-G	8'x5.5'	2200	19	19		2200	-0.60	304SS

- ① PROVIDE WITH ALUMINUM MESH FILTER.
- ② PROVIDE WITH INCADENSCENT LIGHT.

INDIRECT GAS FIRED MAKE-UP AIR UNIT SCHEDULE																
SYMBOL	INPUT MBH	CFM	T.S.P. IN. W.C.	HEATING ②		COOLING			MOTOR				MCA	MOCP	MANUFACTURER & MODEL NUMBER ②	
				EADB	LAT	EADB	EAWB	LADB	VOLT	Hz	Ø	HP				
<div>MA</div> <div>1</div>	230	2050	0.6	0	80	95	63	60	460	60	3	0.75	22	30	AAON RM-006	①③⑤⑧
<div>MA</div> <div>2</div>	780	8500	0.75	0	68	95	63	57.5	460	60	3	5.0	54	60	AAON RM-025	①④⑤⑧

- ① PROVIDE WITH OPTIONAL RETURN AIR BY-PASS. CONTROL OFF SPACE STATIC PRESSURE. SEE 15910.
- ② CONDITIONS AT ALTITUDE OF 5270'.
- ③ BALANCE MINIMUM OUTSIDE AIR TO 400 CFM WHEN IN RETURN BY-PASS.
- ④ BALANCE MINIMUM OUTSIDE AIR TO 2000 CFM WHEN IN RETURN BY-PASS.
- ⑤ PROVIDE WITH POWER EXHAUST CONTROLLED FROM SPACE STATIC. COORDINATE WITH SECTION 15910.
- ⑥ PROVIDE WITH ROOF CURB.
- ⑦ PROVIDE WITH UNIT MOUNTED DISCONNECT.
- ⑧ PROVIDE WITH SUPPLY AND RETURN DUCT SMOKE DETECTORS. COORDINATE WITH DIV. 16 TO WIRE.
- ⑨ PROVIDE WITH HOT GAS BYPASS. COORDINATE WITH ATC TO CONTROL TO MAINTAIN DISCHARGE AIR TEMPERATURE.

EXHAUST FAN SCHEDULE								
SYMBOL	LOCATION	CONTROL TYPE	MIN. ① C.F.M.	STATIC PRESSURE IN. W.G.	POWER HP	VOLTS	MANUFACTURER & MODEL NO.	COMMENTS
<div>EF</div> <div>1</div>	ART STUDIO HOOD #1	⑥	3300	1.25	1.5	120/1/60	PENN DOMEX DX18B ⑤	②③④
<div>EF</div> <div>2</div>	ART STUDIO HOOD #2	⑥	3300	1.25	1.5	120/1/60	PENN DOMEX DX18B ⑤	②③④
<div>EF</div> <div>3</div>	ART STUDIO HOOD #3	⑥	2200	1.25	1.0	120/1/60	PENN DOMEX DX18B ⑤	②③④
<div>EF</div> <div>4</div>	NAIL SALON	⑥	720	0.5	1/6	120/1/60	PENN DOMEX DX16V ⑤	①②③④
<div>EF</div> <div>5</div>	NAIL SALON	⑥	620	0.5	1/6	120/1/60	PENN DOMEX DX16V ⑤	①②③④
<div>EF</div> <div>6</div>	NAIL SALON	⑥	920	0.5	1/3	120/1/60	PENN DOMEX DX16S ⑤	①②③④

- ① SET BALANCE DAMPERS TO CFM LISTED ON PLANS.
- ② PROVIDE WITH UNIT MOUNTED DISCONNECT.
- ③ PROVIDE BACKDRAFT DAMPER IN OUTLET OF EXHAUST FAN
- ④ PROVIDE WITH BIRD SCREEN
- ⑤ OR EQUAL BY OTHER MANUFACTURERS IN SPECIFICATIONS.
- ⑥ PROVIDE WITH WALL SWITCH

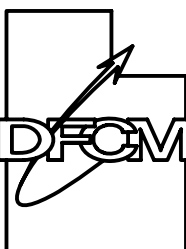
REGISTER, LOUVER & GRILLE SCHEDULE							
SYMBOL	TYPE	SERVICE	MAX CFM ①	NOMINAL SIZE	THROAT SIZE	CEILING TYPE	COMMENTS ②
<div>EG-1</div> <div>CFM</div>	CEILING	EA	360	12x12	10"Ø	LAY-IN ④	PRICE 535 ③
<div>EG-2</div> <div>CFM</div>	CEILING	EA	460	14x14	12"Ø	LAY-IN ④	PRICE 535 ③
<div>R-1</div>	CEILING	RA	540	16x16	16x16	LAY-IN ④	PRICE 535 ③
<div>R-2</div>	CEILING	RA	1265	22x22	22x22	LAY-IN ④	PRICE 535 ③
<div>TG-1</div> <div>CFM</div>	CEILING	TA	1265	22x22	NA	LAY-IN ④	PRICE 535 ③

REGISTER, LOUVER AND DIFFUSER SCHEDULE NOTE S:

- ① MAXIMUM NC = 25 @ MAXIMUM CFM NOTED.
- ② SEE SPECIFICATIONS FOR APPROVED MANUFACTURERS.
- ③ FINISH SHALL BE OFF-WHITE BAKED ENAMEL.
- ④ PROVIDE 24x24 LAY-IN MODULE.

FOR FINAL REVIEW
NOT FOR CONSTRUCTION

State of Utah
Department of Administrative Services



Division of Facilities
Construction & Management
4110 State Office Building
Salt Lake City, Utah 84114
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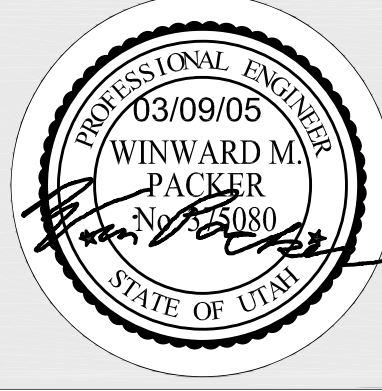
**SNOW COLLEGE
SOUTH
RICHFIELD CAMPUS**

DFCM# 04225710

RICHFIELD, UTAH

MARK	DATE	REVISION

PROJECT MANAGER:
WP
DRAWN BY:
STAFF
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SLW
DATE:
03/09/05
WHW JOB NO.:
04036
SHEET TITLE



**MECHANICAL
SCHEDULES**

SHEET NO.

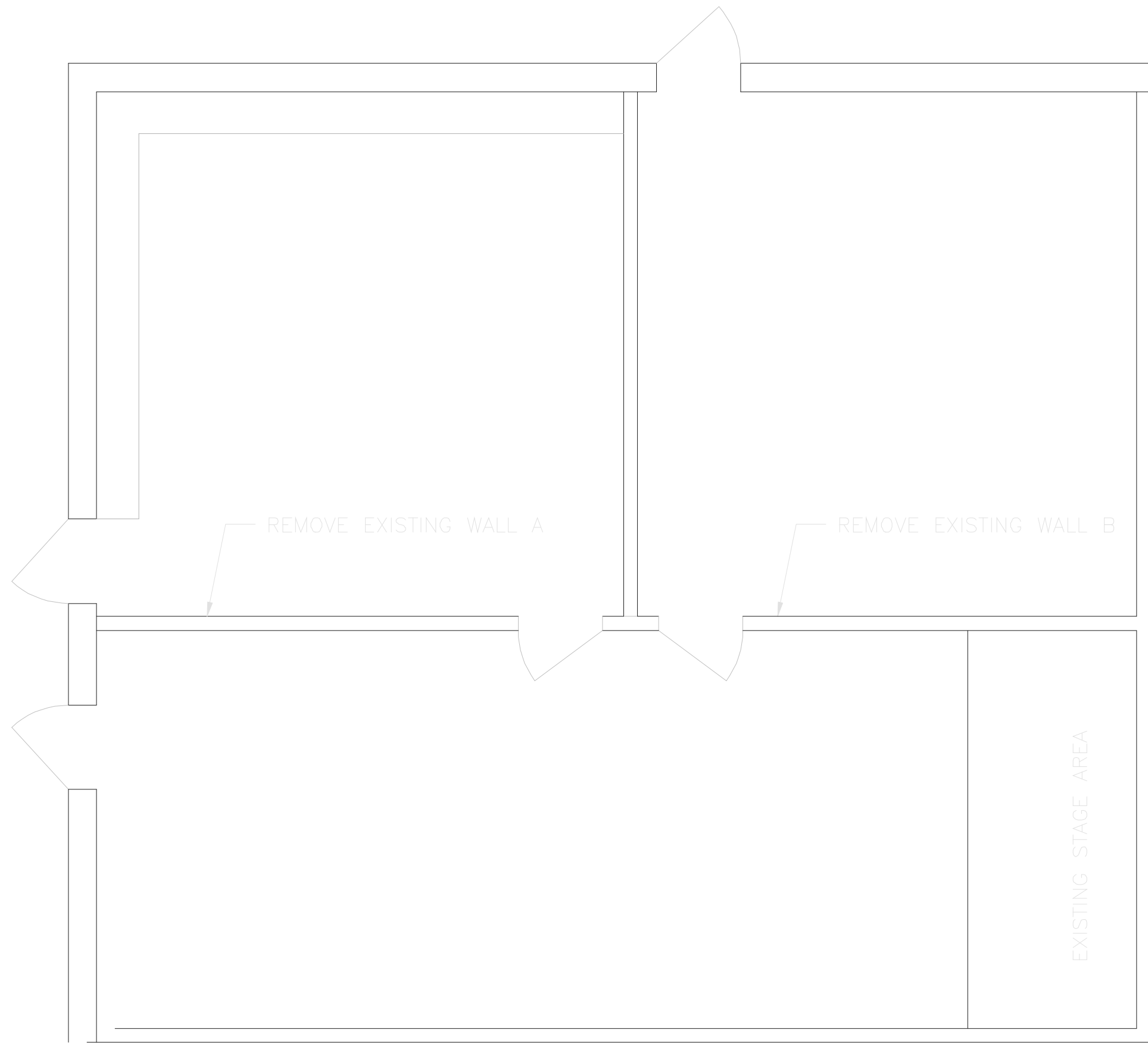
ME601

EL101 ELECTRICAL FLOOR PLAN

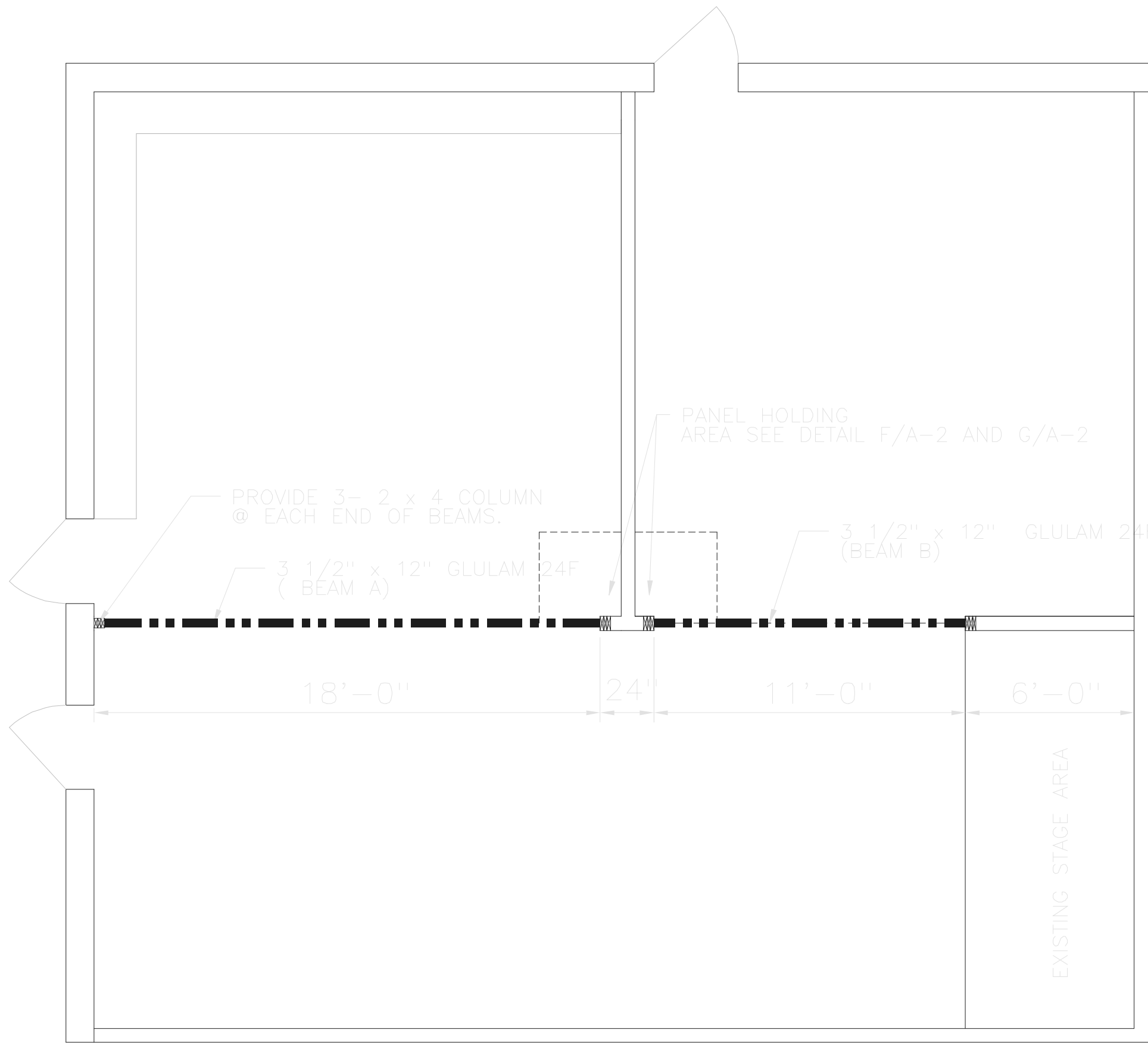
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INDEX	
A-1	DEMOLITION PLAN/ FLOOR PLAN
A-2	CONSTRUCTION DETAILS
A-3	PANEL PLAN/TRACK PLAN



DEMOLITION PLAN



FLOOR PLAN

GENERAL NOTES

- 1-CONTRACTOR TO VISIT SITE BEFORE BIDDING JOB. VERIFY THE DIMENSIONS BEFORE ORDERING MATERIALS. TO SEE SCOPE OF THE PROJECT
- 2- CONTRACTOR TO REMOVE EXISTING WALL A, INCLUDING DOOR AND ALL UTILITIES, INSTALL NEW 3 1/2"x12" GLULAM BEAM, LEAVE 24" OF WALL BETWEEN BEAM A AND BEAM B.
- 3- CONTRACTOR TO REMOVE EXISTING WALL B INCLUDING ALL UTILITIES AND INSTALL NEW 3 1/2" x12" GLULAM BEAM.
- 4- CONTRACTOR TO REPLACE ANY CEILING TILE AND FRAME WORK IF DAMAGED, FINISH TO MATCH EXISTING.
- 5- CONTRACTOR TO REPAIR AND FINISH ANY WALLS THAT ARE ARE AFFECTED BY WORK OR IF DAMAGED, FINISH TO MATCH EXISTING.

REVISIONS

1

06/01/05
DATE
1/4" = 1'-0"
SCALE
PAC
JCC/DN/AL

N E

NASER ENGINEERING
400 SOUTH 460 WEST
RICHFIELD, UTAH 84701
(435) 896-6062

N E

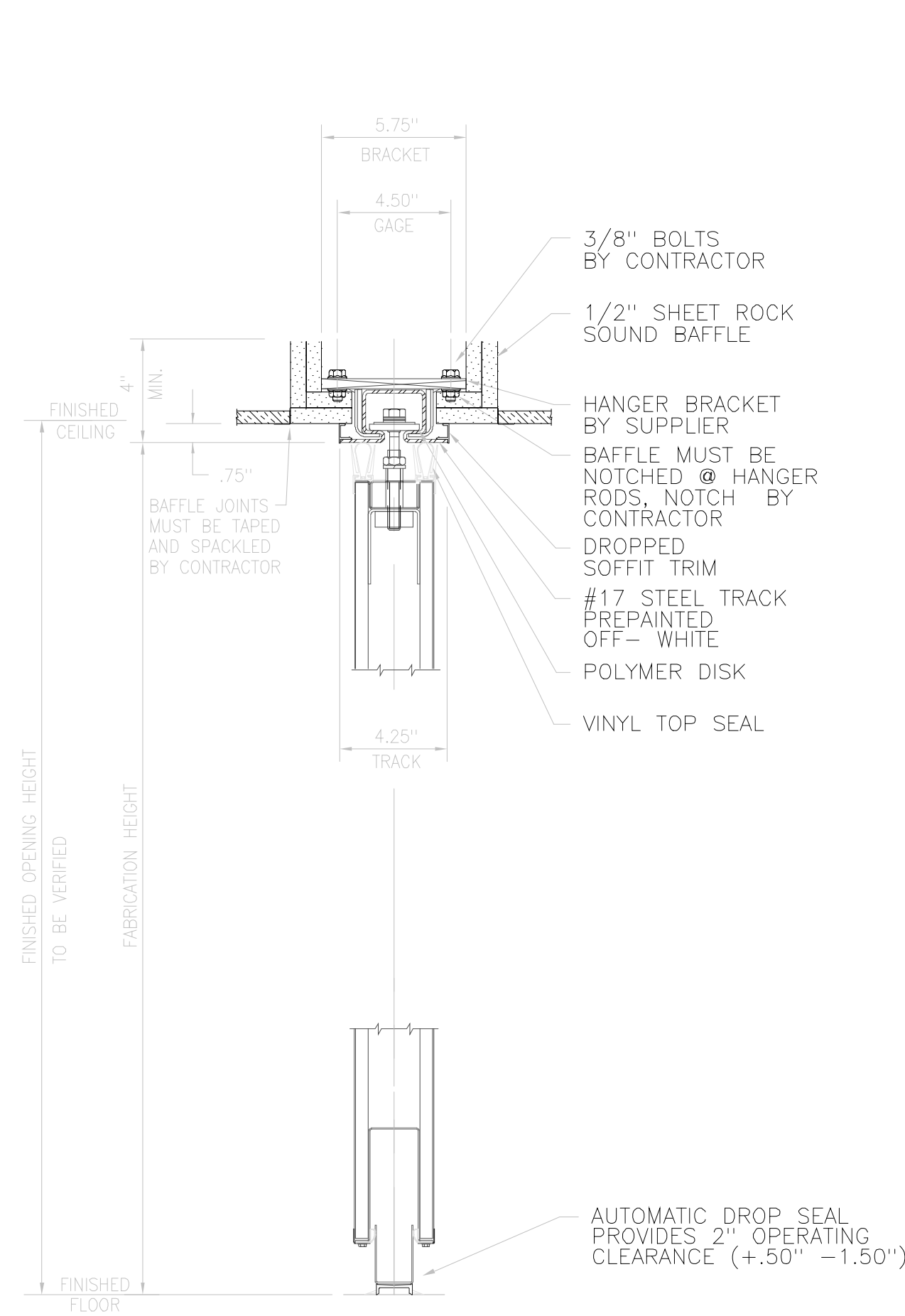
PROJECT: FORTSNOW COLLEGE - RICHFIELD

COSMETOLOGY - DEPT. REMODEL

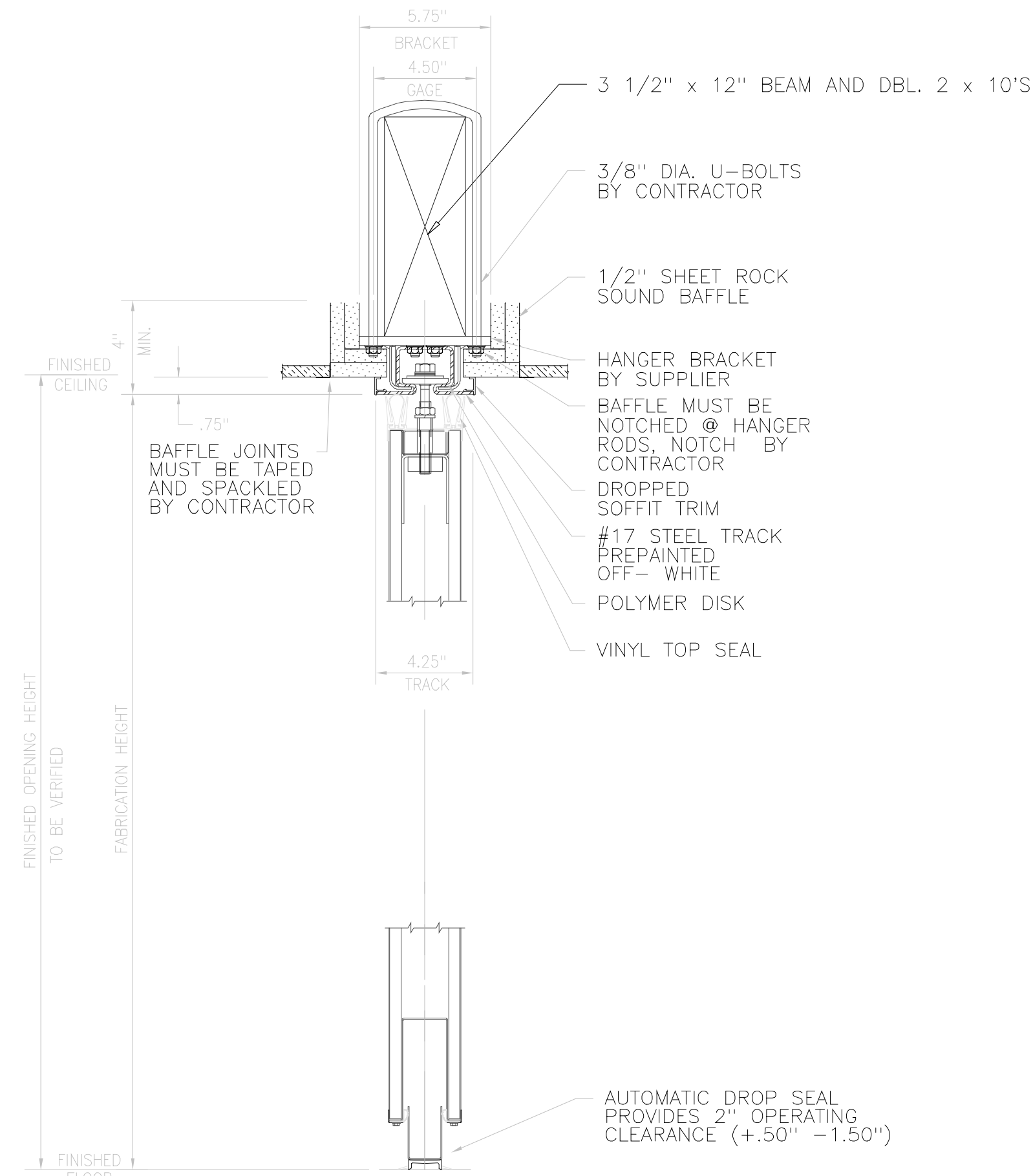
800 WEST 200 SOUTH
RICHFIELD, UTAH

SHEET

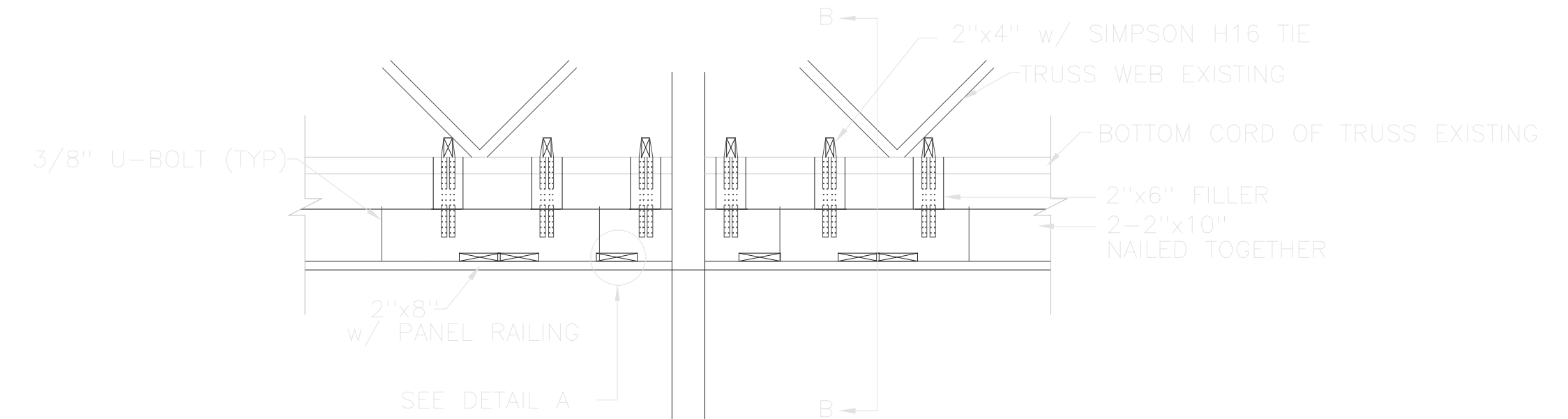
A-1



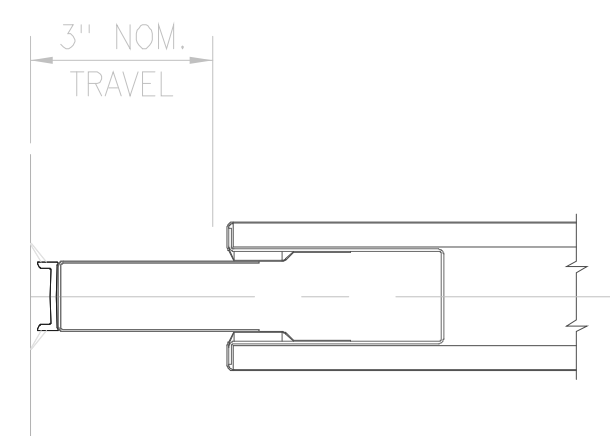
Ⓐ VERTICAL SECTION
SCALE NONE



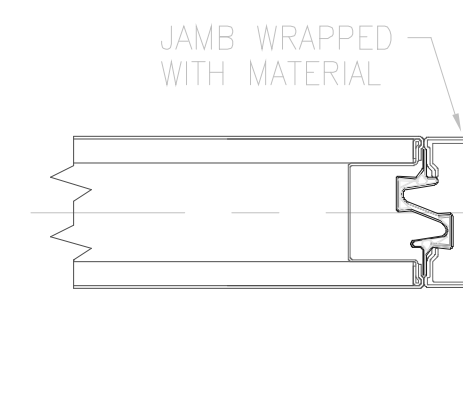
Ⓑ VERTICAL SECTION
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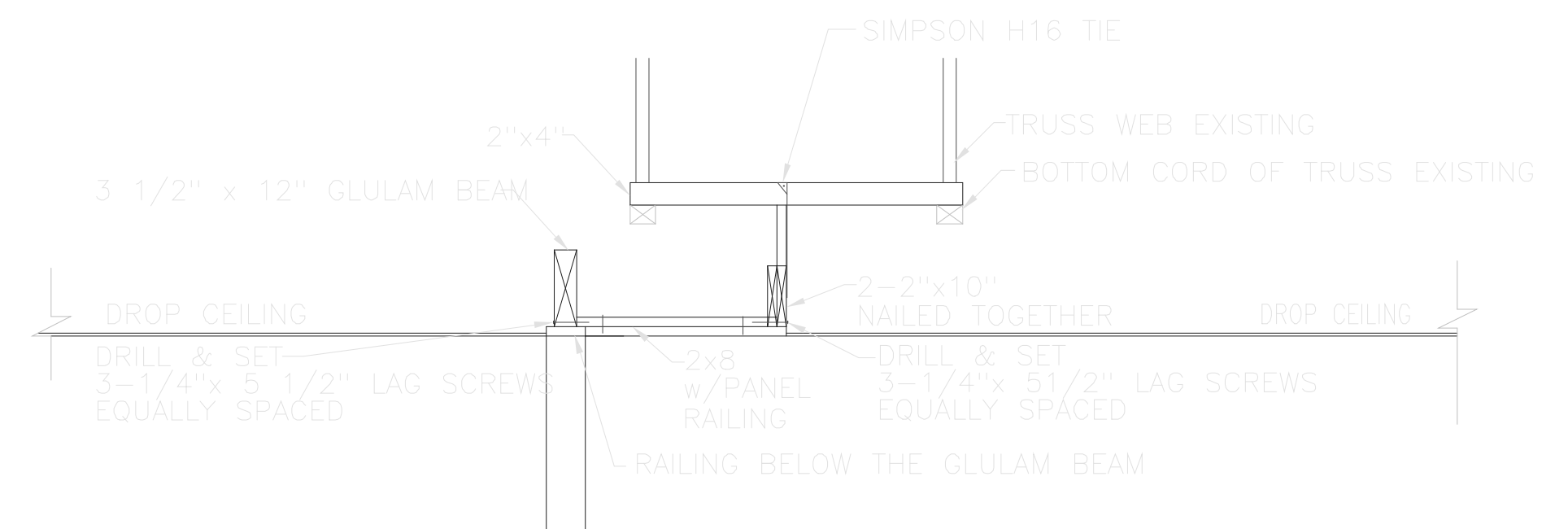
Ⓕ TRACK SUPPORT DETAIL
SCALE 1/2"=1'-0"



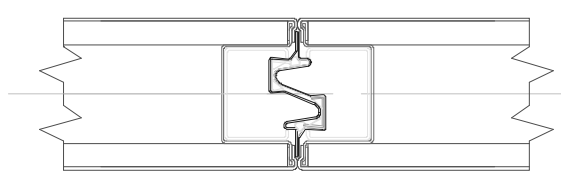
Ⓒ CLOSURE PANEL
SCALE NONE



Ⓓ JAMB
SCALE NONE

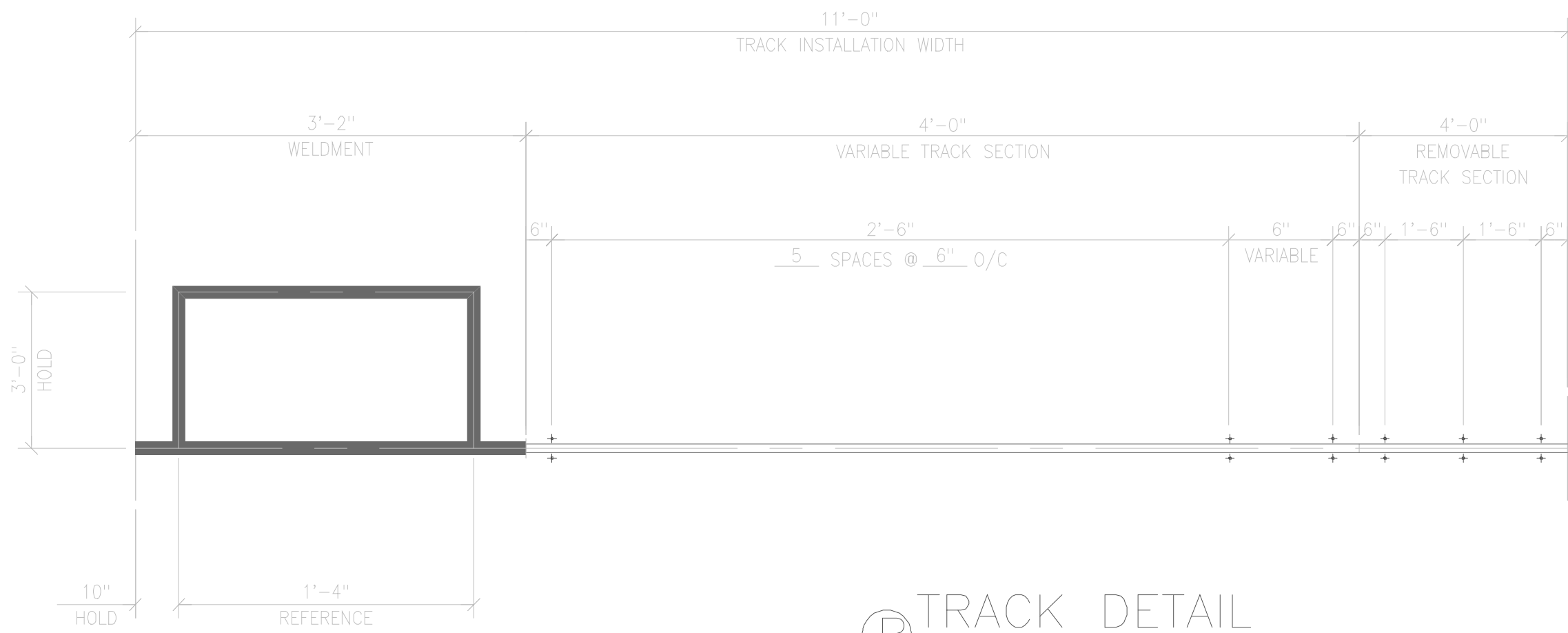


Ⓖ SECTION SUPPORT DETAIL
SCALE 1/2"=1'-0"

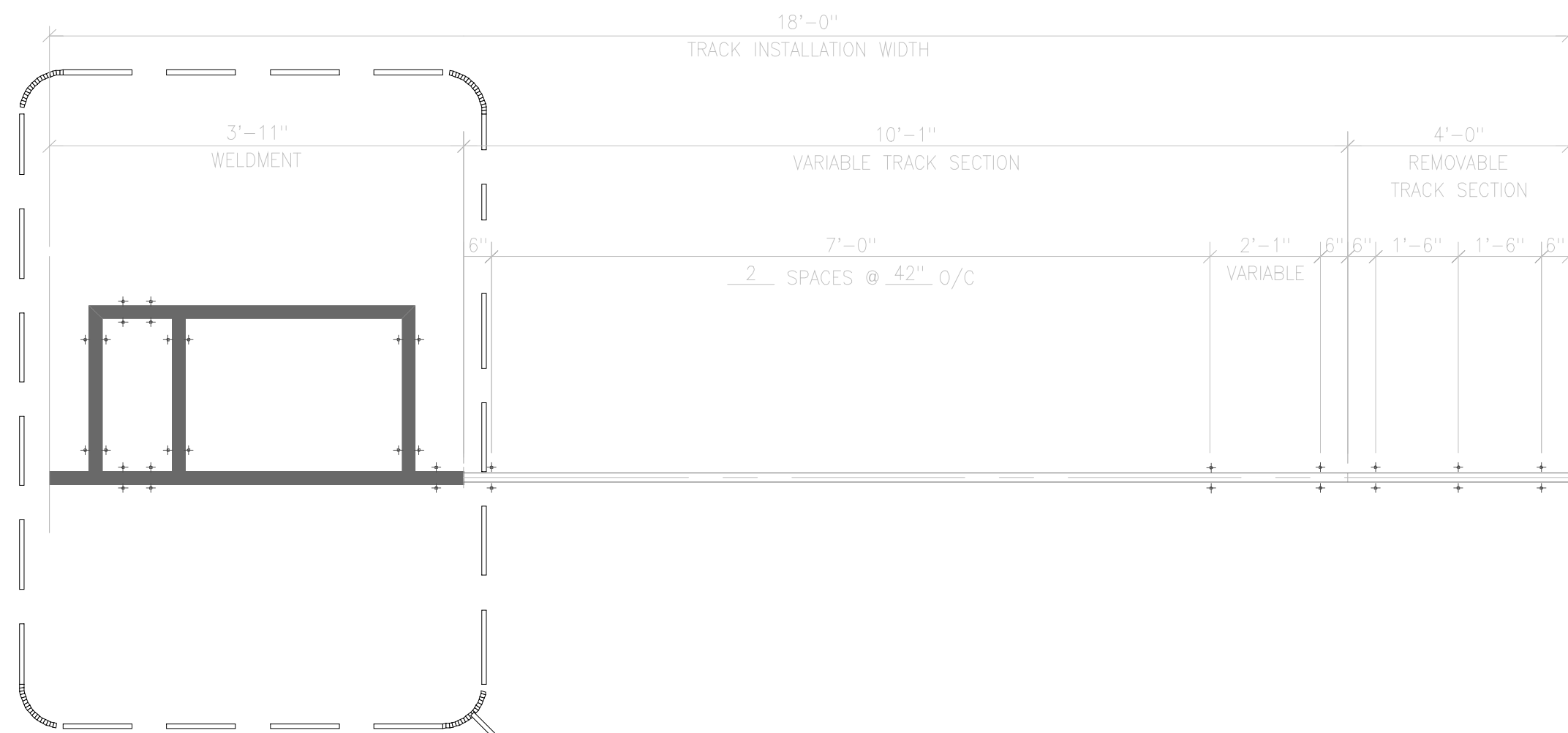


Ⓔ PANEL JOINT
SCALE NONE

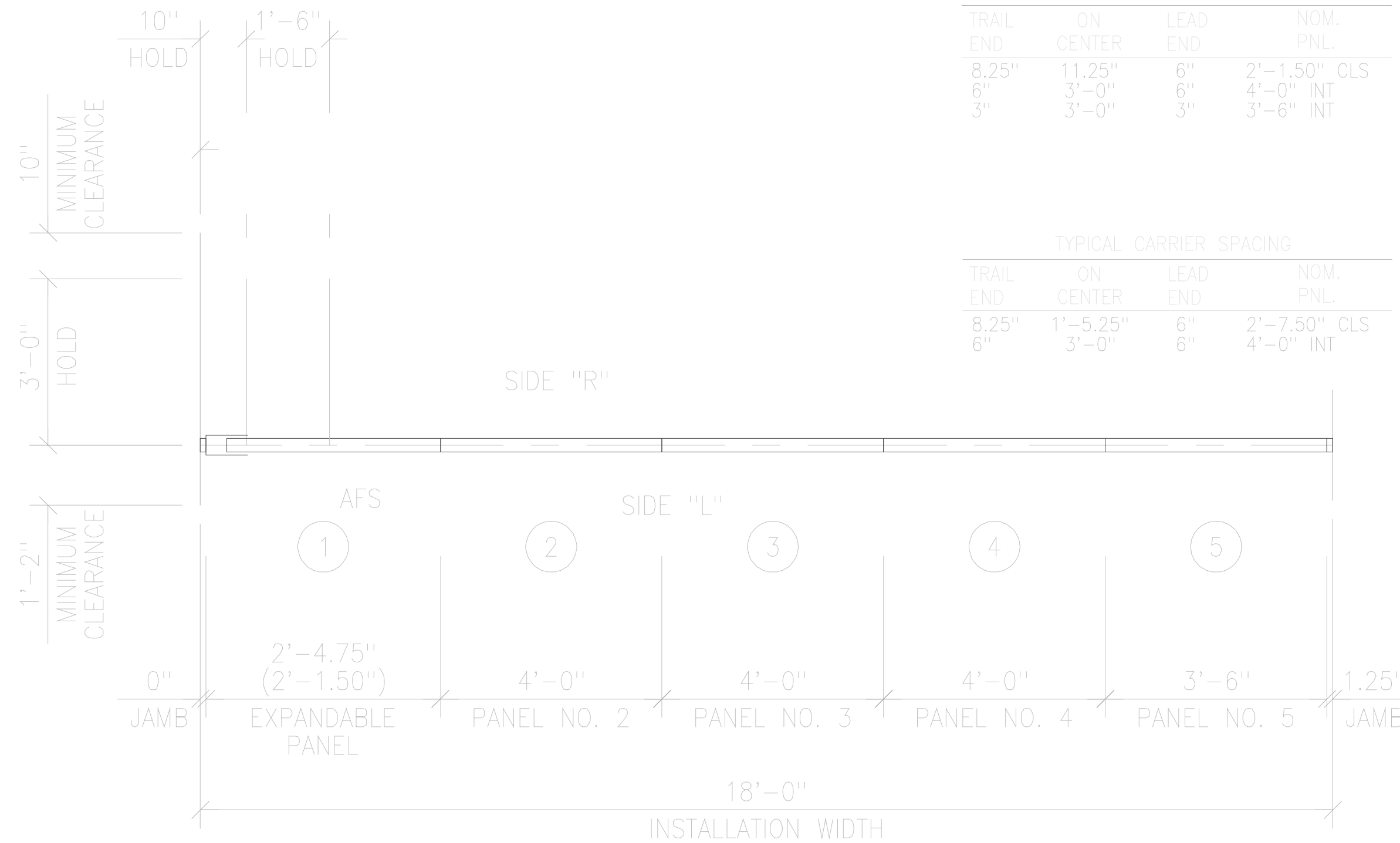
CLOSURE METHOD	EXPANDABLE
FABRICATION HEIGHT	8'-10"
TRACK SYSTEM	#17 BRACKET (RIGHT ANGLE)
BOTTOM SEALS	A2
PANEL ACOUSTICAL RATING	50 STC
HANGING WEIGHT	8 (lbs./sq.ft.)
PANEL SKIN/FACING	LAMINATED STEEL
HINGE COLOR	N/A
PANEL FINISH	VINYL
SELECTION	CHOICE BY OWNER



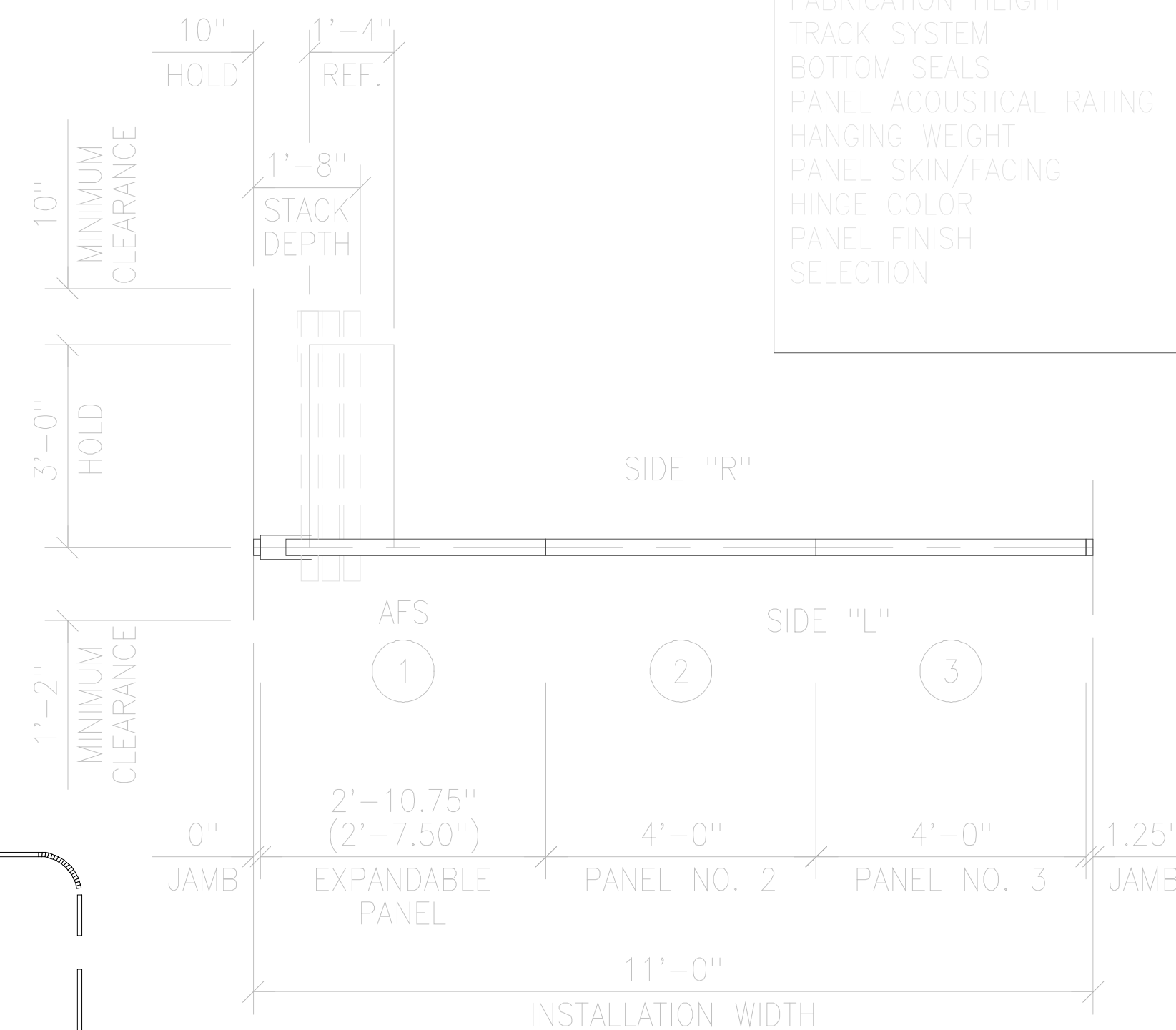
B TRACK DETAIL
SCALE: NONE



A TRACK DETAIL
SCALE: NONE



PANEL PLAN



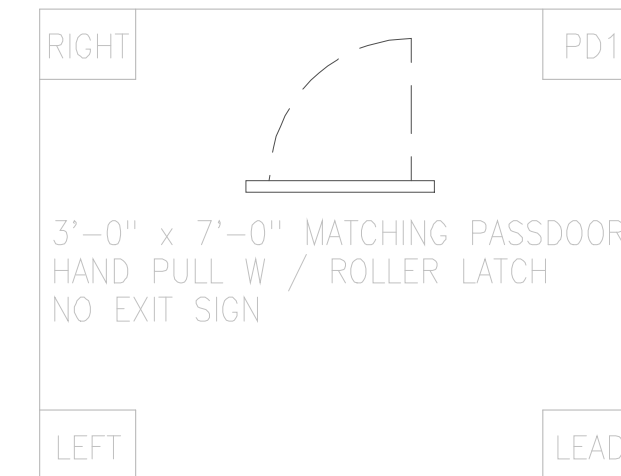
PANEL PLAN

CLOSURE METHOD	EXPANDABLE
FABRICATION HEIGHT	8'-10"
TRACK SYSTEM	#17 BRACKET (RIGHT ANGLE)
BOTTOM SEALS	A2
PANEL ACOUSTICAL RATING	50 STC
HANGING WEIGHT	8 (lbs./sq.ft.)
PANEL SKIN/FACING	LAMINATED STEEL
HINGE COLOR	N/A
PANEL FINISH SELECTION	VINYL CHOICE BY OWNER

TYPICAL CARRIER SPACING			
TRAIL END	ON CENTER	LEAD END	NOM. PNL.
8.25"	11.25"	6"	2'-1.50" CLS
6"	3'-0"	6"	4'-0" INT
3"	3'-0"	3"	3'-6" INT

TYPICAL CARRIER SPACING			
TRAIL END	ON CENTER	LEAD END	NOM. PNL.
8.25"	1'-5.25"	6"	2'-7.50" CLS
6"	3'-0"	6"	4'-0" INT

PANEL SCHEDULE A (18'-0")				
PANEL	WIDTH	SIDE R	SIDE L	PASSDOOR
1	2'-4.75"			
2	4'-0"			PD1
3	4'-0"			
4	4'-0"			
5	3'-6"			
PANEL SCHEDULE B (11'-0")				
PANEL	WIDTH	SIDE R	SIDE L	PASSDOOR
1	2'-10.75"			
2	4'-0"			
3	4'-0"			



GENERAL NOTES

- MINIMUM DIMENSIONS PROVIDE FOR CLEARANCE FROM ALL ADJACENT CONSTRUCTION/FIXTURES FOR ADJUSTMENT, OPERATION, AND SAFETY.
- GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL STRUCTURAL SUPPORT, ADJOINING CONSTRUCTION AND TRIM.
- WALL CONSTRUCTION AT JAMBS MUST BE ADEQUATE FOR SECURING JAMBS AND WITHSTANDING FORCE EXERTED BY THE EXPANDABLE PANEL.
- AFS INDICATES ADJUSTABLE FIXED SEALS.
T INDICATES OPERABLE PANEL ACCESS HOLE.
▼ INDICATES BOTTOM SEAL OPERATOR HANDLE.
- TRACK TO INCLUDE DROPPED SOFFIT TRIM. FURNISH WELDMENT ONLY w/ ALL CAPTURED BRACKETS.
- PUNCH OR DRILL .44" DIA. HOLES, 2.25" EACH SIDE OF CENTERLINE, 4.50" GAGE, AT ALL LOCATIONS, AS NOTED.